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Dmitriy Nicolaevich Lyzhin

**Mechanisms of political regulation of international
relations in the field of the use of genetic agrobiotechnologies**

**Thesis Brief
for the Candidate of Political Science Degree**

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The relevance of the dissertation research. Technological progress has a significant impact on global development and international relations. There is a modification of the essence, structure and main characteristics of the political and economic systems. The market of goods and services is also modernized. Biotechnologies have a special place among the whole set of innovations being introduced. They are understood as a complex of industrial production methods using living organisms and biological processes. Currently, biotechnologies are used in a wide range of sectors of the national economy. One of the most effective in terms of the use of biotechnologies is the agro-industrial complex, among them the most advanced technologies are considered to be directed gene modification.

The key problem that agricultural or agricultural biotechnologies are designed to solve in general is to contribute to national and global food security by increasing the productivity of crops and animals. Thus, they should be attributed to the resources of the authorities, the scale of use of which, theoretically, should lead to an improvement in the living conditions of the population.

At the same time, the effects of the use of agricultural biotechnologies and especially genetic engineering on the international security system remain undetected. A number of specialists see the widespread use of all biotechnologies as a threat to various aspects of its provision, considering products obtained using primarily gene methods to be potentially poisonous and unnatural. There is an opinion that the spread of such technologies leads to an unpredictable impact on the global ecosystem.

The large-scale amount of research and experiments conducted over the past decades has not been able to prove or disprove these conclusions. The lack of scientific justification for the negative impact of gene agrobiotechnologies on global security has led to the possibility of manipulating approaches to this resource in modern political discourse. In fact, the world has divided into two heterogeneous groups with different interests. A number of states, led by the United States, consider the widespread use of such a resource as genetic

agrobiotechnologies acceptable, a significant number of countries – the main role among them is played by the European Union – have limited their use.

This contradiction is reflected in the institutional environment of political regulation in this area. It can be assumed that a significant difference in approaches to the technologies under consideration was reflected in the system of regulatory mechanisms of the United Nations (UN), which tend to conservative approaches, and the World Trade Organization (WTO), which adhere to rather liberal approaches to the dissemination of gene biotechnologies.

In the current period of time, the Russian Federation has chosen for itself a cautiously wait-and-see political position regarding the widespread distribution of transgenic biotechnologies on our territory. Since 2016, a federal law has been in force in Russia, which: "prohibits the cultivation of genetically modified (GM) plants and the breeding of GM animals for food production in our country, as well as the import of seeds of GM plants. At the same time, the sale of GM products is allowed, if they have not been separately banned, as well as scientific research related to this issue."

Despite the fact that the development of agricultural biotechnologies and related problems have traditionally not been a subject field of study within the framework of political science in general and international relations in particular, the current situation in the world requires the use of a political science scientific apparatus to develop optimal approaches to solving the problems in this area. First of all, it seems expedient to find ways to overcome the existing contradictions of the parties at the global level regarding the use of genetic agrobiotechnologies by forming new models of international organizational and legal mechanisms related to the topic under consideration, as well as improving existing ones.

Thus, the relevance of the dissertation research is determined by the fact that the results obtained on the basis of the conducted scientific analysis will clarify the theory and methodology of research in the field of international relations, make it possible to form individual elements of an effective model of the future post-industrial world order, in addition, they can contribute to improving the work of

key international organizations. The use of the results obtained in the dissertation research will also contribute to the preservation of Russia's status as one of the key participants in the system of international relations, as well as ensuring the national security of our country.

The object of the dissertation research is the modern system of political regulation of international relations in the field of the use of agricultural biotechnologies related to gene modification and ensuring international security related to their spread.

The problematic situation of the study is the presence of contradictions between the interests of key actors operating in the international political arena regarding the development, use, distribution, control and safety of gene agrobiotechnologies. The presence of this contradiction leads to a mismatch of international activities in this area, which in general is a challenge for certain parts of the global security system, primarily in the food and technological spheres.

The main working hypothesis is that the use of model organizational and legal mechanisms of political regulation of international relations in the field of genetic agrobiotechnologies. In the form of new structural divisions of the FAO, the UN will allow adequately and promptly resolve the emerging contradictions between the main geopolitical actors in the studied area. At the same time, such mechanisms should meet the interests of the Russian Federation.

The purpose of the dissertation research is to develop models of new organizational and legal mechanisms for the political regulation of international relations in the field of the use of genetic agrobiotechnologies that can neutralize the contradictions existing in this area, while meeting the national interests of Russia.

To achieve the goal, the following tasks of the dissertation research are defined:

1. Study approaches to political regulation in the field of the use of agricultural biotechnologies and especially their genetic direction in the system of

global security, primarily in the food and technological spheres, to consider the experience of international relations in this area.

2. Analyze the main conceptual aspects of the problem of political regulation of international relations in the field of genetic agrobiotechnologies.

3. Consider and compare the conditions and prerequisites for the formation of the institutional environment of the mechanisms of political regulation of international relations in the field of genetic agrobiotechnologies as a factor in ensuring international and national security, to postulate the criteria of effectiveness in their assessment.

4. Determine the nature of interaction and identify key aspects of the contradictions of the main states participating in international relations in the field of genetic agrobiotechnologies.

5. Analyze the role of supranational actors in the formation of the global system of international relations in the field under consideration and to identify shortcomings in the existing organizational and legal mechanisms of political regulation in the field of genetic agrobiotechnologies.

6. Develop model organizational and legal mechanisms of political regulation of international relations in the field of the use of genetic agrobiotechnologies and evaluate their effectiveness, give recommendations on the development of the domestic system of organizational and legal mechanisms in the field of the use of agricultural biotechnologies, taking into account international factors.

The object of the dissertation research is the modern system of political regulation of international relations in the field of the use of agricultural biotechnologies related to gene modification and ensuring international security related to their spread.

The subject of the dissertation research is the mechanisms of political regulation aimed at the development, use, distribution, control and safety of gene agrobiotechnologies.

The theoretical and methodological basis of the dissertation is a number of general scientific and special scientific methods, such as systemic and structural-functional types of analysis, deduction, comparison, generalization, modeling, qualitative expert assessment, as well as synthesis of new knowledge. The results of the study were additionally verified by the method of expert assessments.

The research is based on modern scientific approaches to the development of international politics, international relations and security, including the theory of a multipolar (polycentric) system of international relations (the ideas of E.M. Primakov), the theory of consensus (the works of A. Tocqueville, T. Parsons, E. Durkheim), the theory of technological structures (the works of S.Y. Glazyev), the general theory of systems and the theory of complex systems (the works of M. Castells, J. Rosenau, V.N. Sadovsky, P.K. Anokhin), the theory of international and national security (the works of G. Morgenthau, S.A. Lantsov, A.A. Prokhozheva, A.I. Pozdnyakova).

The study consists of two sequentially implemented stages. At the first stage, the political mechanisms of regulation of gene agrobiotechnologies are analyzed from the point of view of the above theories. At this stage, through systematic and comparative analysis, it is proved that agricultural biotechnologies perform the function of one of the factors of self-organization and ensuring food and technological security. At the same time, their role in the processes of preserving and maintaining international and national security is increasing, the mechanisms of political regulation in this area are becoming more complicated, and their total number is also growing.

At the second stage, organizational and legal mechanisms of political regulation of international relations in this area have been developed using political modeling and synthesis methods. Their effectiveness has been confirmed by the method of expert analysis.

The empirical base of the study is divided into three groups.

The first group of sources used in the preparation of the work includes international treaties and agreements of the United Nations and its individual structures, normative documents of the World Trade Organization, as well as international conventions related to the subject under consideration. For example, this is the UN Convention on Biological Diversity and its Protocols, the World Trade Organization Agreements on Agriculture, and Sanitary and Phytosanitary Measures, as well as a number of others. The study of the sources of this group made it possible to determine the place of agricultural biotechnologies and their genetic direction in the system of international relations, to analyze the change in approaches to them in dynamics, to identify the strengths and weaknesses of the existing mechanisms of political regulation at the international level in this area.

The second group of sources should include regulatory documents of Russia and a number of other countries (USA, EU, China), decisions of the leaders of these states concerning domestic policy, as well as issues of regulation of international relations in the field of the use of genetic agrobiotechnologies. The study of this group of sources made it possible to identify and compare the approaches of the main geopolitical actors to solving the problem of political regulation in the studied area.

The third group of sources should include media materials, including those posted on the Internet. In particular, the study used separate materials of journals, periodicals and online publications such as "Agro-industrial complex - economics and Management", "USA and Canada", "ECO", "Biotechnology", "Science and Life", "BIKI", "Commercial Biotechnology", "Nature", "Future of life", "European Biotechnology", "Cell", "Gen", etc. Consideration of this group of sources made it possible to study in more detail and in detail the changing approaches of various countries and international actors to the problem of political regulation in the field of safety and distribution of agricultural biotechnologies at the global level.

In order to further verify and evaluate the results obtained during the study and discuss the presented models, a series of "brainstorming sessions" was

conducted on the basis of the Research Coordination Center of the Russian Institute for Strategic Studies.

Provisions submitted for protection:

1. The synthesis of the concepts of food and technological security allowed us to formulate a refined definition of the term "food security". It is necessary to use the following interpretation. Food security is a situation in which all the inhabitants of the planet, through the use of modern technologies (genetic, digital, space, etc.), have stable physical and economic access to high-grade food at every moment of their lives.

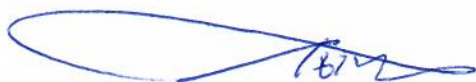
2. The "theory of complex systems" is the most effective for the study of the global political environment and international interactions in the field of the use of genetic agrobiotechnologies. This is due to the fact that it makes it possible to study sociotechnical systems from the point of view of the nonlinearity of their formation, the absence of a limited structure and their ability to reform through self-organization.

3. The formation of an institutional environment for the mechanisms of political regulation of international relations in the field of genetic agrobiotechnologies should be carried out within the framework of a large-format polycentric model of international cooperation, through the achievement of consensus among all interested actors. The criteria for evaluating the effectiveness of individual mechanisms are: sufficiency of resources, sufficiency of authority, sufficiency of legitimacy, proportionality of the timing of decision-making, as well as the relevance of the mechanism in solving the problems it is aimed at.

4. The contradictions of the main world actors (EU and USA) concerning the problem of international regulation in the field of gene agrobiotechnologies are conceptual. However, in essence they are part of a global confrontation between the centers of power and are projected on the international level. In the coming years, this conflict will not be fully resolved, in addition, new participants will join it.

5. The conflict of interests between key actors in the field under study is projected to the international level. As a result, a number of elements of the existing institutional environment of political regulation of international relations in the field of the use of genetic agrobiotechnologies are recognized as insufficiently effective. The organizational and legal mechanisms operating within the UN and WTO systems do not reflect global processes, are excessively general, one-sided, reflecting the position of one of the actors. In this regard, it is necessary to form more universal organizational and legal mechanisms for the political regulation of international relations aimed at the development, development, control and dissemination of agricultural biotechnologies. The organizational structure of key international organizations should be supplemented with specialized units, and the norms of international law regulating the detail in this area should be supplemented with provisions optimizing their interaction.

6. Despite the increasing turbulence in the system of international relations caused by Russia's special military operation in Ukraine, our country should retain its position in the UN and WTO system and act as one of the initiators of optimizing the existing system of international relations in the field of development, development, control and distribution of agricultural biotechnologies. However, to do this, it is necessary to enlist the support of the PRC, as well as to finalize the organizational and legal mechanisms in this area at the national level.



D.N. Lyzhin