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Regulatory framework of the leading countries in the field of science, technology, and innovation

Annotation.

The article authors consider the regulatory foundation of the leading countries - Canada, Ireland, Finland, and South Korea - strategies for the development of science, technology and innovation and show the role of universities in enhancing innovation. The authors note the peculiarities of the formation of an innovative society in Canada, Ireland, Finland, and South Korea, which, according to the world's largest rankings, are among the countries with the highest level of innovative development and demonstrate high rates of development of the knowledge-based economy.

Keywords: science, development of science, problems of science, innovation policy, national innovation strategies.

Introduction: The economic crisis, ecological, demographic, social problems, and the pandemic (the consequences of which we have not yet felt in full) have put the world's economies in the face of unprecedented challenges.

In this regard, the priority is given to human capital, knowledge capital and creativity, the policy of innovation, where the latter plays a major role in the new economic conditions.

All the above issues have had an impact on the goals and means of innovation development programs and strategies. Previously approved programs and models were subject to revision to maximize their impact on economic growth and resource savings.

The main goal of innovation policy is to restore growth and competitiveness. Education and science as social sectors are based on the development of scientific and technical potential, which should be considered not as an accompanying factor, but as one of the sectors of the economy that has the same characteristics, rules, and regulated methods.

In the modern world economy, intellectual potential is given more attention than material values. The ability of the nation to maintain a system of modern and effective education, to increase the potential of the labor force through training and training to ensure the high competitiveness of the nation is an extremely important factor in the world practice of management.

Discussion: Several countries are implementing national strategies that set out the Government's vision for the contribution of science, technology and innovation to socio-economic development and related investment and reform programs.

The experience of the European Union. In the context of rapid globalization and the changing balance of the world economy towards developing countries, the European Union recognizes the crucial importance of innovation to ensure the competitiveness of European businesses [1].

The EU innovation policy is formed on the basis of a large number of strategies, programs and plans, its characteristic feature is multi — stage and avariety of implementation mechanisms. The list of key strategic documents includes the ten-year "Strategy 2020" - the successor to the Lisbon Strategy, which expired in 2010. "Strategy 2020" puts forward three areas — "soft" growth (stimulating knowledge, innovation, education and the digital society)," sustainable "growth (climate, energy, mobility) and" social " growth (employment and professional growth, fighting poverty). At the same time, knowledge and innovation play a crucial role.

Central to Strategy 2020 is the EU initiative to create an Innovation Union and develop a comprehensive plan for implementing the EU Innovation Strategy. The set of specific actions of the plan (more than 30 actions) is aimed at solving the following tasks:

- turn Europe into a world-class research center;

eliminate obstacles to the development of innovative activities (expensive patenting procedure, lack of qualified personnel);

- fundamentally change the relationship between the public and private sectors, in particular through the Innovation Partnership mechanism — an institutional

element of the Innovation Union that unites all stakeholders in innovation (European institutions, national and sub-regional authorities and business).

The results of research on the national strategies of the leading countries have been repeatedly covered in various publications.

At first glance, the national strategies of the leading countries have a lot in common. Indeed, one of the main priorities of national science, technology and innovation strategies is to support innovation in the private sector in order to improve product competitiveness, productivity, living standards and create new jobs. However, in countries that rank high in terms of private sector R & D spending, especially in South Korea, the focus is on strengthening the foundation of science: supporting public research and developing human resources [7,8].

The main objectives of the Strategy for the Development of Science, Technology and Innovation in Ireland

- promoting innovation by improving human capital;
- strengthening research and industrial sector capacity
- increasing the contribution of research and development to the development of the agricultural, environmental and marine industries, health care
- Increase R & D spending to 2.5% of GNP to create a "new type" of economy»;
- improving competitiveness; creating and maintaining conditions for attracting foreign direct investment
- ensuring social unity.

Finland's innovation system is undergoing a new round of reform. The reorientation of the innovation development strategy involves the simplification of a complex and duplicative system, the revision of programs, and the reduction of the number of scientific organizations and universities engaged in R & D. The Research and Innovation Council of Finland (RIC), chaired by the Prime Minister, forms the country's policy in the scientific, technical and innovation spheres.

Together with the Ministry of Employment and Economy and the Ministry of Education and Culture, an Action Plan for the implementation of the new science and Innovation policy has been developed as part of the Government's mid-term review.

The government program sets out guidelines for the development of innovation in the current economic environment. The single most important document defining innovation policy today is the Directions of Research and Innovation Policy. The goal of Finland's innovation policy is to create the best conditions for innovation in the world.

The strategy of "Mobilizing Science and Technology for Canada's Competitive Advantage" is based on four main principles:

- ensuring the quality of products and services that meet international standards;

-identification of priority areas of economic development;

- support for the development of partnerships;

-strengthening business reputation. Priority areas are environmental protection, natural resources and energy, medicine, and ICT.

The long-term forecast of the development of science and technology until 2025 of South Korea assumes the achievement of the highest level in the field of research and development in the Asia-Pacific region, joining the top 10 countries of the world. by 2025-achieving the level of development of science and technology that ensures competitiveness with the countries of the "Big Seven".

Among the main tasks:

- the shift in the innovation system from public administration to private sector regulation;
- increase the efficiency of investment in research and development;
- expanding the internal system of research and development to the level of a global network;
- answers to the challenges of information technology and the biotechnology revolution.

Result: The analysis shows that universities play a crucial role in boosting innovation activity in many countries of the world. It is based on the leading universities of the leading countries that the depressed territories have become centers of high-tech development, so this experience is especially relevant for the post-Soviet countries, turning into advanced countries is the main priority [1].

Universities are important links in the development of the new economy and major centers for generating elements of the regional innovation infrastructure. This shows the special role of higher education as an environment where the basic elements of innovation infrastructure are born technology parks, business incubators, technology transfer centers, venture funds and centers for training specialists in the field of innovation management, innovation centers and centers of marketing, consulting, and consulting, which have a significant impact on the development of innovation processes [2].

High-quality higher education and professional training are crucial for economies that want to move forward in the value chain and not be limited to simple production processes and products. Today, the globalized economy requires national economies to create a pool of educated workers who can quickly adapt to changes in the environment.

Education is a complex process, regulated by political, social, and economic processes. It carries cultural traditions and national characteristics. That is why the education system of each country is unique and unrepeatable. It is extremely difficult to compare such dissimilar systems, and it is even more difficult to find objective criteria for assessing the quality of education in a particular country. However, in most cases, the same universities appear in all the rankings.

Ireland's higher education is recognized worldwide. Ireland has a reputation as the intellectual center of Europe, and investment in education is the basis of the current Irish success, one of the factors in the development of the Irish economy, including in the field of computer technology.

The experience of Finland, which over the past two decades has taken a leading position in the world rankings of innovation and competitiveness, shows that it is education that has been the basis for a high quality of life here. Education is considered a key component of the national development strategy of the country, and the formed system of training and organization of scientific activities is characterized by high efficiency, quality, meets international standards and ensures Finland's

competitiveness in the international arena. Finland, like other Nordic countries, invests heavily in the education system [4, c. 55].

The experience of South Korea. The country made an unprecedented leap in the period 2000-2010, increasing public funding for higher education institutions by an average of 104 percentage points, compared to the average of 35 percentage points for OECD countries.

In the Republic of Korea, the level of education is growing rapidly. According to UN analysts, in the future, the older generation of Koreans will be more educated than today, there will be a noticeable shift in the educational structure of the population and the share of people with higher education will increase significantly [5].

The effectiveness of the innovative development strategies of the leading states allowed them not only to overcome the crisis period with great confidence, but also to create conditions for further development along the innovative path. At the same time, among the key factors influencing the solution of new tasks and the formation of an innovative society is the sphere of higher education, which enjoys special support from the state and society.

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