



Innovative Economic Development of Uzbekistan: Trends and Prospects

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Abstract – The article provides detailed information on the innovative economy and economic potential of Uzbekistan. There are also thoughts on innovative economic development. There are also a number of analyzes of the factors affecting the innovative economy of Uzbekistan.

Key words: innovative economy, economic potential, innovative economic development, affecting factors, industrialization, economic growth rates, GDP.

I. Introduction

In 2021, innovative economic development becomes a prerequisite for long-term economic development. In the context of the phenomenon of “Industrialization 4.0”, the desire of countries to reduce the carbon footprint and improve the quality of life of the population, innovative economic development is becoming a priority postulate in ensuring sustainable economic growth. The main challenges of this decade will be to stimulate economic growth rates that will ensure sustainable development while reducing the consequences for natural and climatic changes.

The world today is facing an unprecedented economic, environmental and health crisis. As studies show, while traditional factors of economic growth, such as energy consumption, financial development, tourism accelerate the accumulation of GDP, they can also lead to environmental degradation in developing countries.

II. Literature review

The question of the role of innovation (science and human capital) in ensuring sustainable economic progress in developing economies is again becoming relevant. Thus, according to the data, countries that directed more financial resources to R&D in the 1990s had a higher level of GDP per capita by 2019 (correlation coefficient is 0.61).

In 2021, innovative economic development becomes a prerequisite for long-term economic development. Investment in technology and human capital must be the driving force behind the transformation of industry, infrastructure, transport and healthcare systems. Consequently, this will make it possible to switch to an energy-efficient economic growth model with the least damage to the environment. In particular, 87% of global carbon dioxide emissions come from the use of traditional energy sources.



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At the same time, empirical studies show that a more intensive transition to renewable energy sources (RES) will reduce the level of carbon dioxide emissions around the world in the long term. Thus, due to technological innovations, the economic benefits of using renewable energy sources in developing countries have increased significantly. For example, the price of electricity generated by solar panels has fallen by 89% over the past 10 years. As part of the vector of a rapid technological boom in the energy sector, the Republic of Uzbekistan is taking active steps to accelerate the transition to a green economy to ensure sustainability.

III. Analysis

The Green Economy Transition Strategy 2019-2030 notes the following expected results: doubling energy efficiency and reducing the carbon intensity of gross domestic product; further development of renewable energy sources, bringing their share to more than 25% of the total electricity generation. The strategy places significant emphasis on the introduction of innovative technologies and solutions in the construction industry, water, agriculture and forestry, as well as the creation of tools for the commercialization of green innovative technologies and products.

In the short term, innovations in medicine will play a paramount role. The current pandemic has shown that only those countries that are actively investing in research in medicine now have the opportunity to be the first to limit the consequences of the pandemic and return the economy to normal functioning.

For example, in the US, Atellica Solution, at the peak of the pandemic, was able to develop equipment that allowed them to conduct 440 tests per hour and produce results within 10 minutes. Such technological solutions make it possible to identify and limit the consequences of a pandemic as quickly as possible. The introduction of telemedicine, artificial intelligence algorithms and nanotechnology will make significant breakthroughs in the detection and treatment of various diseases. Given the importance of the medical industry, the leadership of the Republic of Uzbekistan is taking active measures to jointly develop and produce vaccines in the country, which will limit external dependence in the field of public health.

In addition, the International Center for Molecular Allergology was established by the Ministry of Innovative Development of the Republic of Uzbekistan. The center launched a system to analyze more than 282 allergens using DNA chip technology. The technology transfer of the aerobiological allergen monitoring system was carried out.

Currently, the President of the Republic of Uzbekistan Shavkat Mirziyoyev pays more and more attention to supporting scientific and innovative activities, a number of resolutions related to scientific and innovative spheres have been adopted at the state level, which are being successfully implemented.

At a joint extended meeting of the Senate of the Oliy Majlis and the Parliament of the Republic of Uzbekistan, the President of the Republic of Uzbekistan Sh.M. Mirziyoyev noted that ... "Today we are moving on to the path of innovative development aimed at fundamentally improving all spheres of life of the state and society. And this is natural. After all, who wins in today's rapidly developing world? Only the state that relies on a new thought, a new idea, an



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innovation. If we start building our great future today, we must do it primarily on the basis of innovative ideas, an innovative approach.”

Since 2017, the country's leadership has taken a course towards modernizing the sectors of the economy, as well as stimulating economic growth by activating human capital and stimulating innovation. Thus, in particular, by Decree of the President of the Republic of Uzbekistan UP-5544 dated September 21, 2018, the country approved the Strategy for Innovative Development of the Republic of Uzbekistan for 2019-2021, the main goal of which is the entry of the Republic of Uzbekistan by 2030 into the 50 leading countries of the world according to the Global innovation index.

As a result, since 2018, Uzbekistan has been actively working to enter and improve its positions in international rankings such as the Global Innovation Index (GII) and the Global Competitiveness Index (GCI), and others. In 2020, Uzbekistan was included in this ranking and ranked 93, compared to 122 in 2015. Thus, the reforms that have taken place in the country since 2017 have allowed Uzbekistan to advance by more than 25 positions in the world, ahead of such countries as Egypt, Paraguay, Ecuador and others. A closer look at Uzbekistan's profile in this index shows that this progress was driven by improvements in the time and number of procedures to open a business (8th in the world), the cost of starting a business, the difficulty of connecting to electricity (36th in the world), protection of minority investors (37th in the world), enforcement of contracts (22nd), spending on education (31st in the world), student-teacher ratio (38th), number of patents to GDP (45th place in the world), share of graduates in science and engineering (7th place).

IV. Discussion

A retrospective analysis of the positions of Uzbekistan in 2015 and 2020 showed that the most significant jump in the main components of the index was made by Uzbekistan in terms of market development from 85th to 27th place in the world (58 positions) and “knowledge workers” included in the “business development” component with 135 out of 91 in the ranking (44 positions globally). Among the weak aspects, the study notes the accumulated results of scientific activity, the number and citation of scientific articles.

It should be noted that by the Decree of the President of the Republic of Uzbekistan PP-3365 dated 01.11.2017. the Program of Comprehensive Measures to Strengthen the Infrastructure of Research Institutions and the Development of Innovation Activity for 2017-2021 was approved. In accordance with the specified program for equipping scientific and laboratory equipment and instruments of scientific organizations for 2018-2021. \$ 32.3 million is planned. For the reconstruction and overhaul of buildings and structures of scientific organizations - 116 billion soums.

Strengthening the scientific infrastructure will significantly increase the research potential of scientific organizations and universities, research centers. An analysis of the results of innovative activity showed that 1423 billion soums were allocated from the State budget for the development of the field of science and scientific activity for 2018-2020, the amount of allocated funding for the implementation of one scientific project increased by 3.5 times, 40% of which is



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provided for the acquisition of scientific and laboratory equipment, instruments and consumables, and it is planned to systematically increase the share of spending on science from GDP to 0.8% by 2021. Based on the best world experience, a new mechanism for the formation of a state order for research work has been introduced.

In order to increase the effectiveness of the scientific activities of domestic scientists, the Ministry of Innovative Development is working to increase their publication and patent activity. Since the beginning of 2020, 105 scientific organizations have access to full-text scientific resources of the world-famous publishing house Springer Nature. Also, scientists and medical professionals have access to Elsevier's Clinical Key electronic information platform.

Also last year, the Concept for the Development of Science of the Republic of Uzbekistan until 2030, developed by the Ministry of Innovative Development of Uzbekistan, was adopted, which defines the foundations for the scientific and innovative development of the country in the medium and long term. The concept defines a plan for the phased development of the scientific sphere in Uzbekistan in terms of such indicators as:

increase in the share of funds directed to science from 0.2 to 2% of GDP;

an increase in the share of Uzbekistan in the total number of articles published in international scientific journals indexed in the international scientific database Scopus and Web of Science, from 0.008 to 0.2%;

increasing the involvement of young specialists in science and bringing the average age of scientists up to 39 years;

increase in the composition of young scientific specialists of the highest category from 11 to 30% in the total number of applicants under the age of 39;

increase in the share of the cost of machines and equipment with a service life of up to five years in the total cost of existing machines and equipment in research and development organizations from 12 to 50%.

Taking into account the existing innovative potential and the challenges facing the education system and science in Uzbekistan in the medium term, work remains relevant in the following areas:

- popularization of the results of scientific activities among the population and the involvement of young people in scientific activities, taking into account the increase in gender equality in STEM disciplines;

- stimulating the scientific activity of highly productive scientists and research teams with an emphasis on increasing publications in the leading and most authoritative scientific journals Web of Science. This will significantly reduce the number of scientific articles in the confiscated "predatory" journals;

- increasing the scientific potential of young scientists by creating mini laboratories working on the most relevant narrow scientific topics, which have the opportunity to publish the results of their scientific activities in leading indexed scientific journals;

- improvement of the system of financing science and scientific activities and diversification of sources of financing;



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- stimulation of innovative activity at the regional level and search for growth points for innovative economic development;

- creation of a national innovation mechanism, which is a system of organizational, economic and legal measures and the implementation of certain innovative projects, which will ensure the prompt implementation of research results in the real sector of the economy and the process of selling new products to consumers

V. Conclusion

Work in these areas will make it possible to fully use the potential of domestic science and ensure access to the world market of modern technologies, including through the transfer and commercialization of scientific and technical developments.

References:

1. Usmanova N. Y. DIGITAL ECONOMY IN UZBEKISTAN //Современные проблемы социально-экономических систем в условиях глобализации. – 2020. – С. 163-166.
2. Usmanova N. Y. WAYS OF DEVELOPING DIGITAL ECONOMY IN UZBEKISTAN //Theoretical & Applied Science. – 2020. – №. 2. – С. 101-105.
3. Yunusovna U. N. Classification Characteristics of Financial Investments, Factors and Methods of Influence On Investment Activity //CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES. – 2021. – Т. 2. – №. 2. – С. 90-94.
4. Usmanova N. Y., Primova A. A., Rasulova N. N. The economic content of investment and the role of foreign investment in the economy of Uzbekistan //International Journal of Psychosocial Rehabilitation. – 2020. – Т. 24. – №. 9. – С. 561-566.
5. Nozima A. Content And Methods Of Individualization Of Teaching Activities //International Journal of Progressive Sciences and Technologies. – 2021. – Т. 25. – №. 1. – С. 50-53.
6. Alimova Nozima. (2021). IMPROVING THE TECHNOLOGY OF INDIVIDUALIZATION OF EDUCATION IN THE TEACHING OF ENGLISH TO STUDENTS. World Economics and Finance Bulletin, 4, 9-12. Retrieved from <https://scholarexpress.net/index.php/wefb/article/view/261>
7. Alimova Nozima, & Akhmadov Sarvar. (2021). IMPROVING TECHNOLOGIES OF INDIVIDUALIZATION OF EDUCATION IN TEACHING ENGLISH TO STUDENTS OF NOPHYLOLOGICAL DIRECTION. Euro-Asia Conferences, 8–10. Retrieved from <http://papers.euroasiaconference.com/index.php/eac/article/view/517>
8. Alimova N., Radjabova M. THE ROLE AND IMPORTANCE OF INDIVIDUAL EDUCATION IN THE SYSTEM OF ORGANIZATION //Theoretical & Applied Science. – 2020. – №. 4. – С. 401-404.
9. Alimova N. R. IMPROVING TECHNOLOGY OF INDIVIDUALIZATION ON EDUCATION FOR STUDENTS OF TECHNICAL SPECIALTIES IN TEACHING ENGLISH //Theoretical & Applied Science. – 2019. – №. 12. – С. 352-355