The unique characteristics of the development of the national innovation system in the Republic of Uzbekistan

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https://doi.org/10.5281/zenodo.10467688

Keywords: Innovation, innovation policy, types of innovation, investment activities, infrastructure, science and technology, technoparks, and innovation environment.

Abstract: This paper of this work provides a detailed explanation of the unique characteristics of the development of the national innovation system in the Republic of Uzbekistan, its role in occupying a distinct position in the global economic system, utilizing international labor distribution and specialization opportunities, and achieving the main goal of continuously improving the living standards of the country's population. It also highlights the stages of formation of innovative processes in the country. Additionally, it emphasizes the importance of ensuring competitiveness of the national innovation system and its comprehensive modernization, which is closely related to effective and efficient utilization of external economic factors.

1 INTRODUCTION

In the conditions of modern globalization, innovations are considered an economic resource, and innovative technologies are considered as one of the elements that lead to changes in the world economic system. It is appropriate to analyze interrelated innovations and innovative technologies in a coordinated manner in an innovative environment where economic processes are increasingly accelerating.

In most of the developed countries of the world, the rapid development of economic growth trends is directly related to the development of innovative processes in the country. And each country chooses strategic directions based on its economic, social, and political conditions, taking into account the innovative development system and priorities. Currently, the most important and decisive competitive advantage of any country is the level of development of new knowledge and its effective use in socio-economic development. It is this factor that determines the place and role of countries in the world economy, the level of people's well-being and economic security. Analysis shows that 80-95 percent of the additional growth of the gross domestic product in industrialized countries is due to the contribution of new knowledge based on innovation [1].

Scientific, technical and innovative potential is one of the decisive factors in the socio-economic development of any country. In particular, the role of the state science and technology and innovation policy in solving the socio-economic problems that have arisen in the context of globalization is increasing. At the same time, we can see in the world experience that the gradual socio-economic development of the country and its competitiveness in the foreign market are ensured on the basis of the existence of a developed national innovation system. The main goal of the state innovation policy is to form elements of the national innovation system and ensure their effective interrelationship. One of the main goals of evaluating innovative activity is to determine the contribution of new technologies to the development of the economy of a country. Globalization conditions each one of the country national innovative system role increased see you can _ This is the process during countries in the middle competition technologies are increasing and that's it with together science is developing .

A lot of states economy of resources limitation quantity with is described and As a result product vitality cycle will change . Development from the level strictly look each one state for the most important from goals one national innovative strategy work exit is considered Innovative of activity internationalization conditions while his done increase for high economic , political to issues about conditions Create Demand will be done [2].

2 Materials and Methods

Innovation policy industry developed countries of the 20th century second in half science and

technology of development fast in paces growth with depends without state economic of politics separately priority direction as formed . State policy to form has been approaches each one in the country his to himself special national features depends respectively done is increased [3]. State innovative policy formation for one how much tasks perform important importance occupation is enough

- ✓ state innovative field for infrastructure formation ;
- ✓ scientific and technical the news Create for economic environment provide ;
- ✓ innovative environment and conditions to create , innovative of the field all of participants innovative activity increase for conditions to create ;
- ✓ news for initial demand formation for state resources separation ;

This tasks done in raising innovative activity encouraging tax and another from benefits use need _ Of course , every one country national innovative politics done in increasing , it is known one goals own to the front puts and of development all internal and external factors in consideration received without , innovative activity Demand being done to the degree deliver enable giving politics ie the system chooses _ Many foreign countries innovative entrepreneurship in development generality there is being their _ in most of them state innovative policy formation task in execution and done in raising state active participation is enough

National innovative system concept innovative of the economy important sign as science at the end of the 70s of the XX century come in came _ And national innovative system (MIT) milly economy in development important role to play trust appear it has been . In this regard one how many from years since many scientists research take are going and national innovative to the system different definitions giving they went The evolution of MIT's origins took place over several periods.

In the last 25-30 years, the state policy on building innovative systems at the national and regional levels in the world has accelerated. The concept of "National Innovation System" (MIT) (Freeman, 1987), Nelson (Nelson, 1993), Lundvall (Lundvall, 1992) is expressed in the works. According to Lundval, the origin of MIT goes back to Friedrich List's concept of "National System" (Georg Friedrich List, "The National System of Political Economy", 1841) [1, 2, 3, 4]. As a result of researching the concept, it can be said with confidence that the first serious work on the MIT concept was carried out by K. Freeman. According to him, "National Innovation Systems" (MIT) is a network of institutions in the public and private sectors that import, modify and distribute new technologies in mutual cooperation. However, many scholars have given different definitions to MIT, focusing on one or another aspect of the innovation system [5].

A well-known economist is the founder of the concept of "national innovative systems" (MIT). According to Christopher Freeman, the national innovation system (MIT) is a set of economic subjects and social institutions (values , rights) is a complex system. This means that MIT is a network of private and public institutes and organizations whose activities and interactions lead to the creation, importation, modification and diffusion of new technologies. " National innovative system » (MIT) concept descriptive again many definitions there is .

The concept of innovative development is widely developed by the Organization for Economic Cooperation and Development, the World Bank and a number of other international organizations. At the initiative of these international institutes, a number of large-scale studies were carried out in the following years, and they were directed to the study of the processes of transition of the national economy from the traditional industrial economy to the economy based on knowledge, science, and intellectual potential. For example , in the materials of the Organization for Economic Cooperation and Development, there are a number of definitions in this direction that are quite close to each other in terms of meaning, in which the national innovation system is defined as individual and mutually It is defined as a set of institutions belonging to the private and public sectors that ensure the development and distribution of new technologies in connection with [6].

Summarizing all the definitions, the national innovation system can be defined as follows: MIT is the economic system of the country developed on the basis of institutional features, based on the introduction of innovations, to the innovative model of the interaction of economic entities in order to increase the importance of competition between participants. based, a special form affecting the structure and essence of the state economy. The multivariate interpretation of the concept of MIT is due, on the one hand, to differences in the understanding of these constituent expressions, different approaches of researchers, and on the other hand, to the existence of inter-country differences between the innovation systems of certain countries[7].

At the same time, the analysis of the theory and practice of the formation of innovative systems in a number of countries makes it possible to determine the laws of socio-economic development of MIT. For example,

- the growth of science, education, production and market integration leads to an increase in the volume and intensity of internal interactions and interactions between internal systems and elements of MIT;
- The growth of the role of the state in the process of transition from direct management methods to the indicative planning mechanism in the formation and development of MIT;
- investments innovative orientation increase ;
- MIT in development regions and separately territorial interregional complexes role increase _
- MIT development guarantor economy system all joints change[8].

2.1 In Uzbekistan innovative system formation aspects

Currently, major strategic changes are being implemented in the economy of Uzbekistan. Attracting foreign direct investments, reducing unemployment, improving the standard of living of the population, developing modern production using innovative technologies, increasing labor productivity and rational use of human capital are the most urgent issues. The field of scientific research development and innovative developments and technologies based on it will be an important factor in achieving the goals. The transition to the path of innovative development is one of the important directions of the economic development of the Republic of Uzbekistan in the conditions of globalization and constantly growing competition in the domestic and foreign markets. shows the need to solve existing problems. As the President of the Republic of Uzbekistan Shavkat Miromonovich Mirziyoyev noted, "it is important to form an innovative program, train new generation personnel who will effectively use innovations and investments, and support the development of the owner class. For this, a program of deep technological development of Uzbekistan and modernization of the domestic market is necessary[9].

At the same time, the innovation policy of Uzbekistan for the medium-term perspective is based on the "Strategy of Economic Development of the Republic of Uzbekistan" adopted in February 2017 and intended for 2017-2021. was reflected in the program Decree on This document in the field of the development of the innovative component of the economy envisages the stimulation of scientific research and innovative activities, the creation of effective mechanisms for the implementation of scientific and innovative achievements, the creation of specialized scientific laboratories, high technology centers, technological parks in universities and research institutes[10].

In order to ensure sustainable economic growth, the process of transition to the innovative development system of the economy is being implemented in our country, so such a development system will positively affect and develop our national economy, create innovative ideas, infrastructures, innovative climate, scientific research should also be used in their jobs and science-technology-based fields.

World experience shows that the gradual development of the country and its competitiveness in the foreign market are ensured on the basis of the existence of a developed national innovation system. The main goal of the state innovation policy is to ensure the formation and interconnection of the structural elements of the national innovation system.

The innovative economic theory, which is considered one of the most relevant economic theories for all countries, including Uzbekistan, is currently in the stage of its formation, and bringing the content of the modern innovative theory into a single system is one of the urgent problems.

Of course, before starting to create a national innovation system, it is necessary to identify the sources of innovation. Based on this, each country forms its innovation strategy. The sources of innovation in world theory and practice can be divided into the following two main types:

1. Importing existing technologies and knowledge from abroad, adapting them to local conditions and taking into account the characteristics of the national economy.

2. To create new knowledge and technologies not only for the national system, but also at the global level.

These two tasks create conditions for the transition to an innovative system.

Transferring the economy of Uzbekistan to the path of innovative development was developed taking into account the development trends of the world economy, the factors that ensure the stable development of the national innovation system in the long term. The priority of the state support policy is ensured in the effective modernization of the priority sectors of the economy, the activity and systematization of the scientific and technical sphere.

At present, in the period when developed and developing countries in the world economy are on the path of scientific and innovative, Uzbekistan is also trying to move to the innovative path of economic modernization in order to rise to the level of world scientific and technical development. To do this, within the framework of the formation of the national innovation system, it is necessary to adapt the science and technology complex to market conditions, to determine the specific directions of the development of science, technology and technology, to develop fundamental sciences, the most important practical research and development, as well as to provide legal protection of intellectual property and aimed at effective use.

Thus, according to the Decree of the President of the Republic of Uzbekistan, the establishment of the Ministry of Innovative Development as a single competent body for innovative and innovative infrastructure was a strong impetus for the development of the national model of economic development[11].

In the initial period when MITs are being formed, the state plays a special role in the development of the general innovation strategy. And then, as in most industrialized countries, business leads the way.

The role of the state is to facilitate the production of basic knowledge (in universities) and high-tech infrastructure, and to create a healthy, institutional environment for infrastructure and innovation. Within this general model, the national characteristics of MIT are formed. The business environment has an impact on the active operation of MITs. The analysis of innovation processes in developed countries shows that large businesses show more innovative activity[12].

In fact, the most important place in the formation of MITs belongs to the state. Because the

state determines the rules of operation of MITs, provides them with necessary resources and financially supports them. In the operation of MITs, providing innovative activities with information technologies, creating an electronic environment in any field, scientific and technical information systems, wide use of Internet networks are important. there are major problems to be solved and the tasks arising from them.

The first and most important of these is financial investment. This aspect is important in collecting the necessary financial resources and implementing large innovative projects in order to renew the leading sectors of the economy. B is in it investment big investment input through done if increased , both funds and technology is achieved .

We should also take into account that the most important direction for the development of innovative activity is the creation of an innovative information supply system covering national, regional and network innovation processes.

2.2. In the country Innovative system development trends

The fact that a single information system serving innovative activities, especially the commercialization and transfer of technologies has not yet been established in the country is one of the tasks on the way to creating MIT. Information support of technology commercialization and transfer process plays an important role in accelerating innovation activities. Information helps to increase the ability of the subjects of the innovation environment to perceive technology , ensures the continuous operation of the environment, eliminates existing interruptions in the innovation process during the transition from fundamental research to commercial technologies through ITTKI, and helps to unite the participants of the innovation process[13].

Our compatriot scientist O. Sattorkulov, who has conducted a lot of research on MIT, said, " We should know very well that without diversifying production, we can launch and sell our products on the foreign market, ensure foreign currency income, create new high-tech production and work. It is impossible to talk about creating an export program to achieve the goals. First of all, it is necessary to ensure rapid development and targeted support of industries that have high competitiveness in the world market and can become a locomotive of economic growth, modernization and diversification of the economy in the future [14].

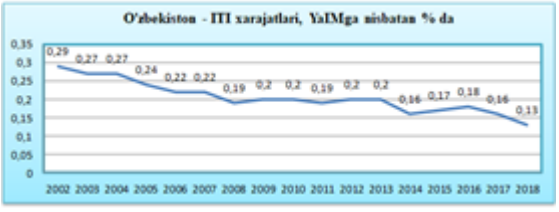
The development and use of the concept of the national innovation system allows applying a systematic approach to the evolution of the innovation process in the country's economy. Perhaps one of the main advantages of creating MIT is the recognition of the crucial importance of knowledge and innovation for the "new" economy, the involvement of all new elements in the process of creation, distribution and use of new knowledge, the expansion of its participants, as well as the involvement of the national economy in the world economy. its directions. Knowledge-based economy can be shown schematically as a system based on four pillars: innovation system, information society, continuous education and state innovation policy. Obviously, before starting to create a national innovation system, it is necessary to identify the sources of innovation.

Due to the low ability to pay for advanced technologies and innovations in the domestic market, due to the fact that science is far away from practice (because currently most scientific work is carried out not to create innovations, but to achieve high positions, qualification exams are it is not a secret to anyone that some scientific works are submitted to the public, and some scientific works are written by others) we should also point out the low demand for the results of scientific and technical activities of the real sector of the economy and the absence of a full-fledged market for innovative products in the republic[15].

In fact, many educational organizations and higher educational institutions are not conducting necessary scientific work for the development of the economy, and even if they are conducted, they are not being put into practice. Innovative researches and projects , which can be put into practice, remain on paper. It can be considered that it is due to the absence or lack of relations between higher educational institutions and organizations. As a result, the transition of development to the innovative system is becoming difficult.

Since 2002, budget funds for financing scientific institutions have been introduced in our republic on the basis of a grant agreement of a scientific team or with an appropriate budget structure created as a result of a competition for a specific research task. In 2004 and 2014, a comparative analysis of the distribution structure of state investments in the fields of state scientific and technical programs showed that their main share corresponded to the share of applied research: they accounted for 68% of the total financial support in 2004, 58% in 2014 did

We should pay attention to one more aspect, the indicators of scientific research and education expenses in our country as a percentage of GDP are very low compared to other developing, innovative countries. (Fig. 3.1.1), (Fig. 3.1.2).

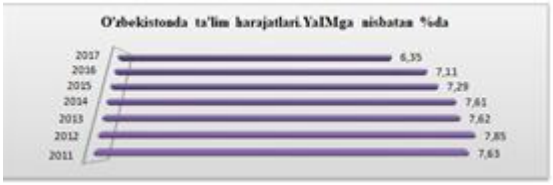


Source : Uzbekistan statistics committee information based on the author by Created

(Figure 3.1.1) . _ Uzbekistan - scientific research works expenses to GDP in % relative to .

In this analysis, we can see that the expenses allocated to scientific research work are decreasing

year by year. Compared to 2002 and 2018 this expenses to GDP compared to 2 times fell _ That's it years during ITI costs from 0.2% fell brogan and of this as a result Scientific research works subsided . Innovative activity take on the go scientific prohibition attention and funds to their work strengthen it is necessary



Source : Uzbekistan statistics committee information based on the author by Created

(Figure 3.1.2) in Uzbekistan education expenses - to GDP in % relative to

Uzbekistan education for separated expenses analysis 7.63% in 2011, 7.29% in 2015, and up to 6.35% in 2017 that it decreased feel can _ Providing the national innovation system with highly qualified specialists and scientific staff should be one of the tasks of the country for innovative development.

In recent years, more attention has been paid to innovative activities and the creation of a clearly defined innovation system in our country. Thus, the state emphasizes that increasing the level of productive forces and the welfare of the nation is not only related to the realization of its natural, but also intellectual resources [16].

CONCLUSIONS

In conclusion, taking into account the objective trends of the development of its economy, it is appropriate for Uzbekistan to form, develop and apply a model based on the use of its scientific and technical potential, attracting foreign investments and technologies. The formation and development of an effective innovation sector should be based on attracting the advanced achievements of science and technology, including our own discoveries (if they can compete with those of other countries) and foreign "know-how".

The results of the analysis of the conditions and problems of the development of the innovative system of our country made it possible to determine aspects such as the financing of the innovative system mainly by the state, the liberalization of foreign economic relations, the improvement of the investment environment, the creation of innovative infrastructure, and the focus on scientific research and experimental construction work.

Thus, an increase in state spending on scientific research, state support for the development of education and training of highly qualified personnel, development of infrastructure in conjunction with a policy based on international cooperation, development of ITIs and institutions engaged in scientific research; creation of conditions to encourage innovative initiative; creation of a chain of interdependence between business and creators of new knowledge and technologies; Continuous improvement of information and communication technologies infrastructure; creation of the educational system, especially higher educational institutions; preservation and development of strategically important technologies; creating a favorable innovation environment in the country can help to achieve such results.

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