American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 04 ISSUE 02 PAGES: 66-72
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

OSCAR PUBLISHING SERVICES

Journal Website: https://theusajournals.com/index.php/ajsshr

Research Article

STATISTICAL ANALYSIS OF THE STATE OF THE SCIENTIFIC PERSONNEL TRAINING SYSTEM IN THE GLOBAL INNOVATION INDEX

Submission Date: February 11, 2024, **Accepted Date:** February 16, 2024,
Published Date: February 21, 2024
Crossref doi: https://doi.org/10.37547/ajsshr/Volume04Issue02-11

Shahrukh Sh. Fazliddinov
Independent Researcher Of The Institute Of Personnel Training And Statistical Research, Uzbekistan

ABSTRACT

Creating the necessary institutional conditions for the sustainable development of the innovation ecosystem, including improving the political, legal and business environment aimed at stimulating innovation, and continuing reforms in this direction is the requirement of the time.

KEYWORDS

Institutional conditions, reforms, boundaries, scientific and innovative activities, activities.

INTRODUCTION

Creating the necessary institutional conditions for the sustainable development of the innovation ecosystem, including improving the political, legal and business environment aimed at stimulating innovation, and continuing reforms in this direction is the need of the hour.

Over the past years, the main institutions that make up the innovation system of our country have been identified, the boundaries, elements and participants of innovation activities have been determined, measures have been taken to develop scientific and innovation activities, effective mechanisms have been developed, and a legal framework for the formation and further improvement of innovation potential has been developed.

“Innovation is the future. We must start building our great future based on innovative ideas. It is not for nothing that we are following the path of innovative

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 04 ISSUE 02 PAGES: 66-72
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

development and digital economy. Because in today's fast-paced world, who will win? The country that relies on new ideas, new ideas and innovation will win."

The Global Innovation Index (GII) provides information on multiple aspects of innovation-led economic growth, directly covering key sectors within countries. Among them, there is also a field of science in which the overall innovation index is determined by assessing the indicators "Human Capital and Research Activity" and indicators in other similar fields. According to the 2022 report, 81 detailed measurement criteria were calculated for 131 countries, and the GII has become one of the leading indicators for assessing the innovation performance of economies. Today, the GII has become an important benchmarking tool for policymakers, investors and other stakeholders to assess annual progress in innovation.

The new edition of the GII is a project designed to fill gaps in the assessment of innovation in previous reports by assimilating new information and applying the latest research. The GII is based on two sub-indices – the innovation input sub-index and the innovation output sub-index. These sub-indices are calculated as follows:

Subindex "Investment in Innovation": five types of input components cover elements that ensure the innovative activity of the national economy, these are: the quality of institutions, human capital and research activities, infrastructure, market development and business development. These components determine aspects of the environment that support the development of innovation in the economy.

Subindex "Investment in Innovation": five types of input components cover elements that ensure the innovative activity of the national economy, these are: the quality of institutions, human capital and research activities, infrastructure, market development and business development. These components determine aspects of the environment that support the development of innovation in the economy.

The overall GII score is equal to the average value of the input and output subindices.

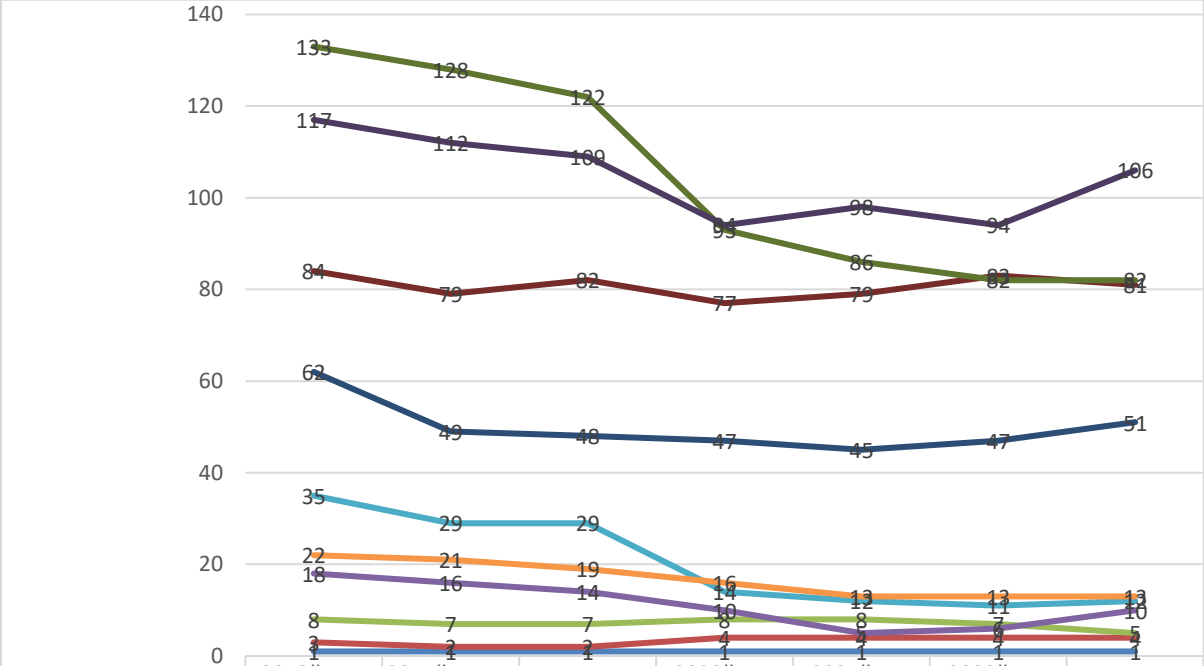
Since 2007, this ranking has been developed by Cornell University, INSEAD business school and the World Intellectual Property Organization (WIPO), and the data is published annually. The index covers 81 indicators, divided into 7 areas and 21 groups, and each country is scored on a corresponding normalized score from 0 to 100.

15 indicators of this index are obtained from international indices, 4 from surveys conducted by the World Economic Forum, and 61 from quantitative statistical databases of relevant international organizations and other studies from October of each year to February of the following year. to the end and compiles a ranking of countries. The leaders of the 2022

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 04 ISSUE 02 PAGES: 66-72
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Publisher: Oscar Publishing Services

ranking are mainly European countries, led by Switzerland, with the USA in 2nd place and Denmark in 10th place. Uzbekistan was first recognized in the ranking in 2015 at 122nd place among 141 countries. In 2020, after an 8-year break, Uzbekistan rose 34 places and took 93rd place among 131 countries. In 2022, it rose 40 places among 132 countries and took 82nd place and became the leader of Central Asia, and among the countries of Central and South Asia it took 3rd place after India and Iran (Figure 1.1).

To achieve this result, the large-scale reforms in the field of science and innovation carried out in our country in recent years, as well as the special attention paid by the head of our state to the development of the industry, deserve special attention.



	2013й год (142 страны)	2014й год (143 страны)	2015й годl (141 страна)	2020й год (131 страна)	2021й год (123 страны)	2022й год (132 страны)	2023й год (132страны)
Швейцария	1	1	1	1	1	1	1
Англия	3	2	2	4	4	4	4
Сингапур	8	7	7	8	8	7	5
Южная Корея	18	16	14	10	5	6	10
Китай	35	29	29	14	12	11	12
Япония	22	21	19	16	13	13	13
Россия	62	49	48	47	45	47	51
Казахстан	84	79	82	77	79	83	81
Узбекистан	133	128	122	93	86	82	82
Киргизстан	117	112	109	94	98	94	106

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 04 ISSUE 02 PAGES: 66-72
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Publisher: Oscar Publishing Services

1.1-fig. Country indicators in the GII by year

From the above diagram we see that our country has only grown in the GII ranking over the past 10 years, that is, it has grown by 45 points.

The main areas of the GII rating are 1) Management institutions, 2) Human capital and scientific research, 3) Infrastructure, 4) Market development, 5) Business development, 6) Knowledge and technology, 7) Creative products.

In this regard, in this study, the main directions of the GII, that is, the second direction "Human capital and scientific research", are divided into three parts, and each of them covers the following directions: five, four and three:

Education:

- Current expenditure on education in relation to GDP;

- Government spending on students in relation to GDP;

- Duration of the study period, in years;

- PISA scales for reading, mathematics and natural sciences;

- Student-teacher ratio in the secondary education system.

Higher education:

- Admission to a higher educational institution;

- Higher education in the field of science and technology;

- Mobility when entering a university;

- Admission to higher education institutions.

Research and development:

- Number of scientific personnel;

- Expenses for scientific research;

- Quality of research institutions.

In paragraph 2.3 of the second direction "Human capital and scientific research" of the GII, that is, "Scientific research and development", the main object of this scientific research is considered, and analyzes were carried out on the site of each of them in global innovation. index (Table 1.1).

1.1-table

The position of Uzbekistan in the indicators of scientific research and development of the Human capital and scientific research direction of the GII rating

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 04 ISSUE 02 PAGES: 66-72
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Publisher: Oscar Publishing Services

Of the year	2012	2013	2014	2015	2020	2021	2022	2023
Number of participating countries	141	142	143	141	131	123	132	132
Indicators	Position							
Research and development		123	85	92	94	95	93	92
Number of researchers			56	58	70	69	73	69
Research and development costs					99	99	98	99
Global research companies					42	41	38	40
Quality of research institutions		68	70	73	77	74	72	71

- No information provided.
- This indicator has been added since 2016.

As we can see from the table above, in the period 2012-2015. our country did not find a place in the GII due to lack of data. By the Decree of the President of the Republic of Uzbekistan dated November 30, 2017 "On the organization of the Ministry of Innovative Development of the Republic of Uzbekistan" No. PQ-3416, the only ministry in Central Asia was created, and as a result, thanks to numerous openness policies carried out in our country, starting in 2020, our country entered the GII rankings again in 2020, and when it returned, it rose 34 positions compared to previous years and took 93rd place, and thus, Uzbekistan achieved good results. Global Innovation Index ranking rises with positive results.

It will not be an exaggeration to say that the adoption of this Decision served as an impetus not only for innovation, but also for many reforms in the field of science and its development.

We all know that today countries of the world with high rates of economic and social development allocate high amounts of funds from the state budget to the gross domestic product for the development of education and science for the country's youth. In recent years, more than 60 percent of the state budget has been aimed at developing the social sphere of Uzbekistan. In particular, the share of funds allocated to the education system in our country's gross domestic product is increasing, which, in turn, serves

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 04 ISSUE 02 PAGES: 66-72
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Publisher: Oscar Publishing Services

to strengthen our country's position in the GII rankings of world arenas in the area of human development. capital and scientific research. Below we can see the position of Uzbekistan in the second direction of the GII (Table 1.2).

1.2-table

Uzbekistan's place in the GII in terms of human capital and scientific research

Of the year	2012	2013	2014	2015	2020	2021	2022	2023
Number of participants	141	142	143	141	131	123	132	132
Position	35	86	77	76	77	72	65	89

Rating and ranking of our country on 12 indicators, which include human capital and scientific research, current problems and what needs to be done to ensure that by 2026 our country is among the 56 leading countries in the world according to the Index. The ranking aims to put forward important suggestions and recommendations.

In this scientific work, the GII covers 12 indicators of human capital and scientific research, the data necessary for calculation, ranking requirements, positions, information for each indicator will be disclosed to collecting international organizations.

The GII shows the level of development of science in countries, the level of use of innovative potential in countries. This makes it possible to analyze the place of innovation potential in the national economy. So, science ensures high-speed development of the country's economy, but this area requires a large amount of funds, as it requires long-term investments.

REFERENCES

1. Resolution of the President of the Republic of Uzbekistan PQ-3416 dated November 30, 2017 "On the organization of the Ministry of Innovative Development of the Republic of Uzbekistan";
2. Resolution of the President of the Republic of Uzbekistan dated February 25, 2019 No. PQ-4210;
3. Decree of the President of the Republic of Uzbekistan No. PF-165 dated July 6, 2022;
4. National database of legislative information of the Republic of Uzbekistan https://lex.uz/uz/;

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 04 ISSUE 02 PAGES: 66-72
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Publisher: Oscar Publishing Services

5. Address of the President of the Republic of Uzbekistan Sh.M. Mirziyoyev to the Oliy Majlis. – T. 2018, 19-20 b;
6. "Scientific and practical journal of fundamental research" No. 3, Tashkent - 2023, pp. 19-20;
7. Information from the World Intellectual Property Organization (WIPO).