

GKI RANK 78 /141

GKI SCORE 45.9

WORLD AVERAGE 47.8

COUNTRY PERFORMANCE SUMMARY

Uzbekistan is a moderate performer in terms of its knowledge infrastructure. It ranks 78th out of 141 countries in the Global Knowledge Index 2024 and 17th out of the 35 countries with high human development.

UZBEKISTAN

KEY INDICATORS
GDP (US\$ billions): 319.174
Population: 35,652,307
HDI: 0.727

AREAS OF STRENGTH

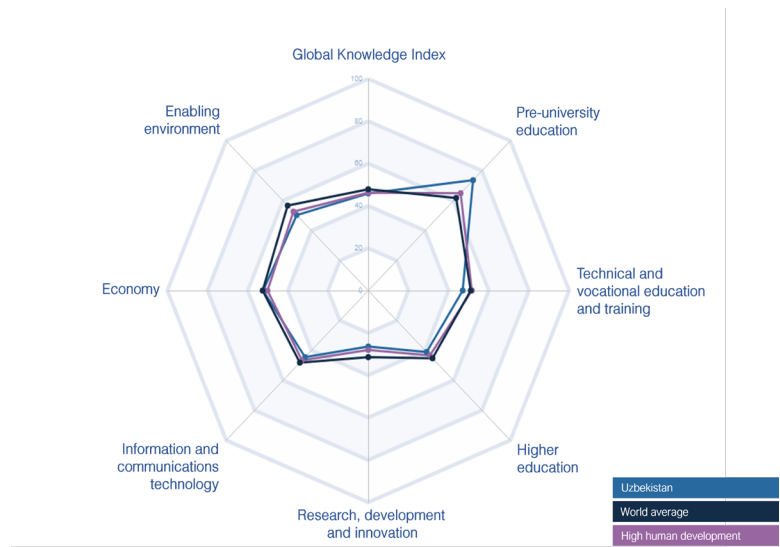
- + Completion rate in upper secondary education, wealth parity
- + Tertiary graduates from STEM programmes (%)
- + Unemployment rate with advanced education
- + Gross fixed capital formation (% GDP)
- + Ease of starting a business

AREAS OF IMPROVEMENT

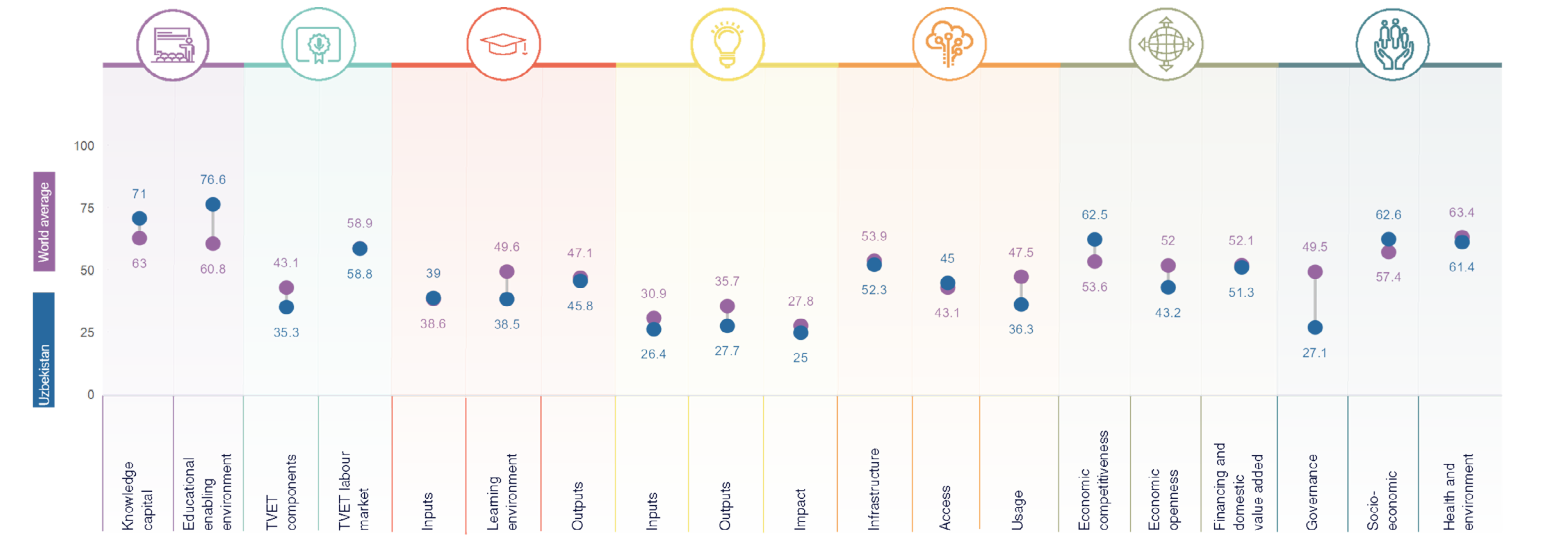
- PCT applications (per 100 billion GDP)
- Ratio of high-skill TVET occupations earnings to average wage
- Citable documents per R&D personnel in higher education
- GERD per researcher
- Internet activities by individuals (%)

SECTORAL INDICES

	RANK	VALUE
PRE-UNIVERSITY EDUCATION	41	73.8
TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	94	47
HIGHER EDUCATION	85	41.1
RESEARCH, DEVELOPMENT AND INNOVATION	93	26.4
INFORMATION AND COMMUNICATIONS TECHNOLOGY	82	44.5
ECONOMY	66	52.3
ENABLING ENVIRONMENT	89	50.4



GKI PILLARS





UZBEKISTAN

	Rank Value	
PRE-UNIVERSITY EDUCATION	41	73.8
Knowledge capital	63	71
Enrolment	57	90.6
Net enrolment rate in primary education	27	98.5
Net enrolment rate in lower secondary education	37	98.2
Net enrolment rate in upper secondary education	76	74.9
Completion	4	86.9
Years of compulsory education in primary and secondary	3	92.3
Completion rate in upper secondary education	6	97.2
Gross intake ratio to the last grade of lower secondary education	18	71.1
Outcomes	92	35.5
Assessment of 15-year-old students in math, science and reading	82	5.8
Learning-adjusted years of schooling	51	65.3
Educational enabling environment	25	76.6
Expenditure	50	40.2
Government expenditure on primary education (% GDP)	61	33.6
Government expenditure on secondary education (% GDP)	15	46.5
Government funding per primary student (% GDP per capita)	28	55.5
Government funding per secondary student (% GDP per capita)	80	25.4
Resources	46	95.2
Pupil-trained teacher ratio in primary education	36	90.4
Pupil-trained teacher ratio in secondary education	27	94
Schools with access to computers in primary education (%)	38	98.1
Schools with access to computers in secondary education (%)	52	98.2
Early learning	32	74
Gross enrolment ratio in early childhood education	47	53.9
Proportion of children who are developmentally on track	15	74.8
Proportion of children with stimulating home learning environments	n/a	n/a
Pupil-trained teacher ratio in pre-primary education	26	93.4
Equity and inclusiveness	11	97.1
Completion rate in upper secondary education, gender parity	14	98.2
Completion rate in upper secondary education, wealth parity	3	93
Completion rate in upper secondary education, location parity	1	100
TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	94	47
TVET components	114	35.3
Continuous training and skilling	132	17.3
Firms offering formal training (%)	103	17.3
Labour force participation rate with short-cycle tertiary education	n/a	n/a
Participation rate in formal and non-formal education and training	n/a	n/a
TVET structure	47	53.7
Government expenditure on vocational education (%)	n/a	n/a
Share of students enrolled in secondary vocational programmes	99	7.3
Share of students enrolled in post-secondary vocational programmes	1	100
TVET quality and qualifications	124	34.9
Extent of staff training	51	60.7
Quality of vocational training	58	56.3
Ratio of high-skill TVET occupations earnings to average wage	121	6.6
Ratio of medium-skill TVET occupations earnings to average wage	110	15.9
TVET labour market	85	58.8
Efficiency of the labour market	106	61.9
Firms constrained with inadequately educated workforce (%)	20	90.7
Employment educational mismatch (%)	n/a	n/a
Proportion of skilled production workers	111	33.1
Unemployment rate with vocational education	n/a	n/a
Post-TVET employment	90	39.8
Share of TVET occupations	85	51.4
Manufacturing employment (%)	87	28.2
Equity and inclusiveness	56	74.6
Enrolment in vocational education, gender parity	40	85.6
Vulnerable employment rate	80	63.6

	Rank Value	
HIGHER EDUCATION	85	41.1
Inputs	70	39
Expenditure	24	40.1
Government expenditure per tertiary student	97	2.8
Teaching staff compensation (% tertiary expenditure)	9	77.3
Enrolment	77	16.1
Enrolment in bachelor's or equivalent level (%)	53	28.3
Enrolment in master's, doctoral or equivalent (%)	105	3.9
Resources	72	60.7
Pupil-teacher ratio in tertiary education	90	58.4
Researchers in higher education (%)	29	63.1
Learning environment	110	38.5
Diversity and academic freedom	102	38.5
Teachers in tertiary education, gender parity	38	84.4
Inbound mobility rate	103	1
Academic freedom	111	30.2
Equity and inclusiveness	n/a	n/a
Gross attendance ratio for tertiary education, gender parity	n/a	n/a
Gross attendance ratio for tertiary education, wealth parity	n/a	n/a
Gross attendance ratio for tertiary education, location parity	n/a	n/a
Outputs	73	45.8
Attainment	57	27.4
Educational attainment rate, bachelor's or equivalent	70	27.4
Educational attainment rate, master's or equivalent	n/a	n/a
Educational attainment rate, doctoral or equivalent	n/a	n/a
Employment	57	82
Labour force participation rate with advanced education	105	68.2
Unemployment rate with advanced education	6	95.8
Impact	111	28.1
University-industry collaboration in R&D	36	56
Citable documents per R&D personnel in higher education	97	0.2
RESEARCH, DEVELOPMENT AND INNOVATION	93	26.4
Inputs	78	26.4
Inputs of R&D institutions	76	25.5
GERD (% GDP)	99	2.7
GERD per researcher	102	1.8
Researchers per thousand labour force	64	8
Tertiary graduates from STEM programmes (%)	4	89.4
Inputs of RDI in business enterprises	79	20.7
GERD performed by business enterprises (%)	69	1.2
GERD financed by business enterprises (%)	41	52.5
Researchers in business enterprises (%)	57	15.4
Firms that spend on R&D (%)	88	13.5
Inputs of societal innovation	63	33.8
High-skilled employment (%)	n/a	n/a
Intellectual property payments (% total trade)	80	7.6
State of cluster development	30	59.9
Outputs	107	27.7
Outputs of R&D institutions	102	29.9
Average documents per researcher	102	5.1
Citations per document	98	25.2
Resident patent applications (per 100 billion GDP)	39	59.4
Outputs of RDI in business enterprises	85	23.9
Intellectual property receipts (% total trade)	58	14.8
Industrial design applications (per 100 billion GDP)	76	50.9
PCT applications (per 100 billion GDP)	132	0.1
Firms producing new products and services (%)	69	29.9
Outputs of societal innovation	104	27.1
Trademark applications (per 100 billion GDP)	60	15.8
Cultural goods exports (% exports)	82	58.8
Printing and publishing output (% manufactured output)	93	6.6
Impact	81	25
Quality	42	29.6
Research institutions prominence	74	6.9
Growth of innovative companies	25	57.8
ISO 9001 quality certificates (per billion GDP)	43	18.3
ISO 14001 environmental certificates (per billion GDP)	20	35.6
Linkages	115	6.2
GERD financed from abroad (%)	95	0.6
Joint ventures per strategic alliance deals (per billion GDP)	89	3.2
Computer software spending (% GDP)	78	14.9
Business development	65	39.2
New business density per thousand population	57	11.2
Firms with products and services new to the market (%)	50	67.2



UZBEKISTAN

	Rank	Value
INFORMATION AND COMMUNICATIONS TECHNOLOGY	82	44.5
Infrastructure	77	52.3
Coverage	104	50.7
3G/4G mobile network coverage (% population)	94	90.6
Secure Internet servers per 1 million population	78	48.1
Investment in telecommunication services (% GDP)	110	13.3
Quality	59	28.4
Mobile upload and download speeds	83	9.6
Fixed-broadband upload and download speeds	58	25.7
Fixed-broadband subscriptions by speed per hundred people	50	49.7
Affordability	88	77.8
Fixed broadband basket (% GNI per capita)	89	60.6
Mobile broadband basket (% GNI per capita)	59	95.1
Internet and telephony competition	n/a	n/a
Access	69	45
Subscriptions	43	68.2
Active mobile-broadband subscriptions per hundred inhabitants	49	52.1
International Internet bandwidth per user	68	56.4
Households with Internet access at home (%)	21	96.1
Skills and employment	80	21.7
Individuals with standard ICT skills (%)	69	12.1
Tertiary graduates from ICT programmes (%)	54	31.3
ICT employment (%)	n/a	n/a
Usage	100	36.3
Services	84	46
Government online services	57	76.5
Fixed broadband Internet traffic per subscription	99	5.9
Mobile broadband Internet traffic per subscription	82	13.8
Internet users (%)	46	87.8
Outcomes	119	26.6
ICT PCT patent applications (per 100 billion GDP)	108	20.5
E-participation	51	69.9
Internet activities by individuals (%)	85	7.4
Trade in digitally deliverable services (% total trade)	132	8.6
ECONOMY	66	52.3
Economic competitiveness	37	62.5
Infrastructure investment	70	51.8
Gross fixed capital formation (% GDP)	6	62.2
Logistics performance	87	40
Transport productive capacity	91	31.7
Building quality control	74	73.3
Business agility	24	73.1
Ease of starting a business	7	96.2
Insolvency recovery rate	79	37.5
Entrepreneurial employee activity rate	n/a	n/a
Extent of corporate transparency	12	85.7
Economic openness	97	43.2
Trade and diversification	67	50.8
Trade (% GDP)	81	15.5
High-technology trade (% total trade)	35	29.2
Product concentration	89	68.9
Market concentration	75	89.4
Financial openness	101	35.6
Chinn-Ito financial openness	88	16.3
Foreign direct investment, net inflows (% GDP)	58	41.6
Debt dynamics	85	48.8
Financing and domestic value added	75	51.3
Financing and taxes	55	61.9
Domestic credit to private sector (% GDP)	79	15.6
MSME financing gap (% GDP)	56	77
Tax and contribution rate (% profit)	40	70.8
Bank non-performing loans (%)	65	84.2
Domestic value added	92	40.7
Medium- and high-tech activities value added	82	18.8
Industry and services value added (% GDP)	123	54.7
Labour underutilization rate	39	79.6
Output per worker	91	9.5

	Rank	Value
ENABLING ENVIRONMENT	89	50.4
Governance	108	27.1
Political environment	111	26.1
Peace and stability	78	39.6
Voice and accountability	130	12.6
Quality of institutions	107	28.1
Rule of law	116	21.7
Control of corruption	110	24.5
Government effectiveness	91	38.2
Socio-economic	61	62.6
Gender equity	78	67.8
Female-to-male ratio in parliament	43	52.9
Female-to-male labour force participation	123	54.7
Female-to-male ratio in Internet usage	79	95.8
Social inclusion	56	75.4
Social protection coverage (% population)	66	54.9
Adult literacy rate	1	100
Youth not in employment, education or training (%)	60	71.3
Standard of living	57	44.5
Poverty headcount ratio (% population)	15	83.1
GDP per capita	100	6
Health and environment	92	61.4
Health	67	76.5
Universal health coverage	60	74.8
Healthy life expectancy (years)	74	64.5
Under-five mortality rate	73	90.1
Environmental performance	111	46.4
Renewable energy consumption (%)	134	1
Ecological footprint per capita	54	87
Natural hazard exposure	105	51

* All values are normalized to a scale from 0 (worst) to 100 (best).