



**GKI
RANK** 114 /141

**GKI
SCORE**

37.4

**WORLD
AVERAGE**

47.8

GHANA

KEY INDICATORS

GDP (US\$ billions): **229.639**

Population: **33,787,914**

HDI: **0.602**

COUNTRY PERFORMANCE SUMMARY

Ghana is a weak performer in terms of its knowledge infrastructure. It ranks 114th out of 141 countries in the Global Knowledge Index 2024 and 18th out of the 24 countries with medium human development.

AREAS OF STRENGTH

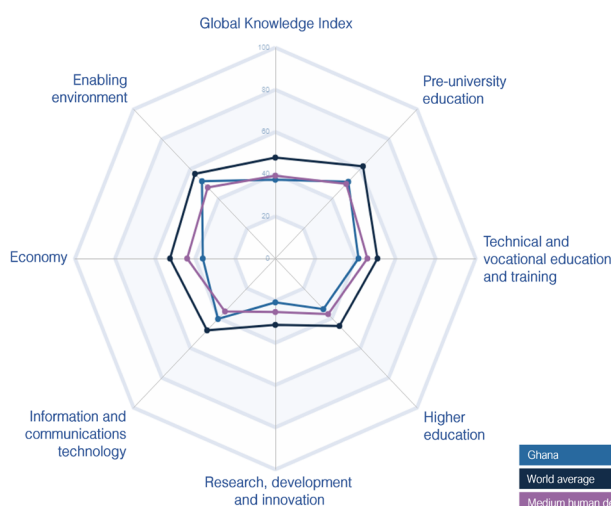
- + Trade in digitally deliverable services (% total trade)
- + Female-to-male labour force participation
- + Firms constrained with inadequately educated workforce (%)
- + Researchers in higher education (%)
- + Firms offering formal training (%)

AREAS OF IMPROVEMENT

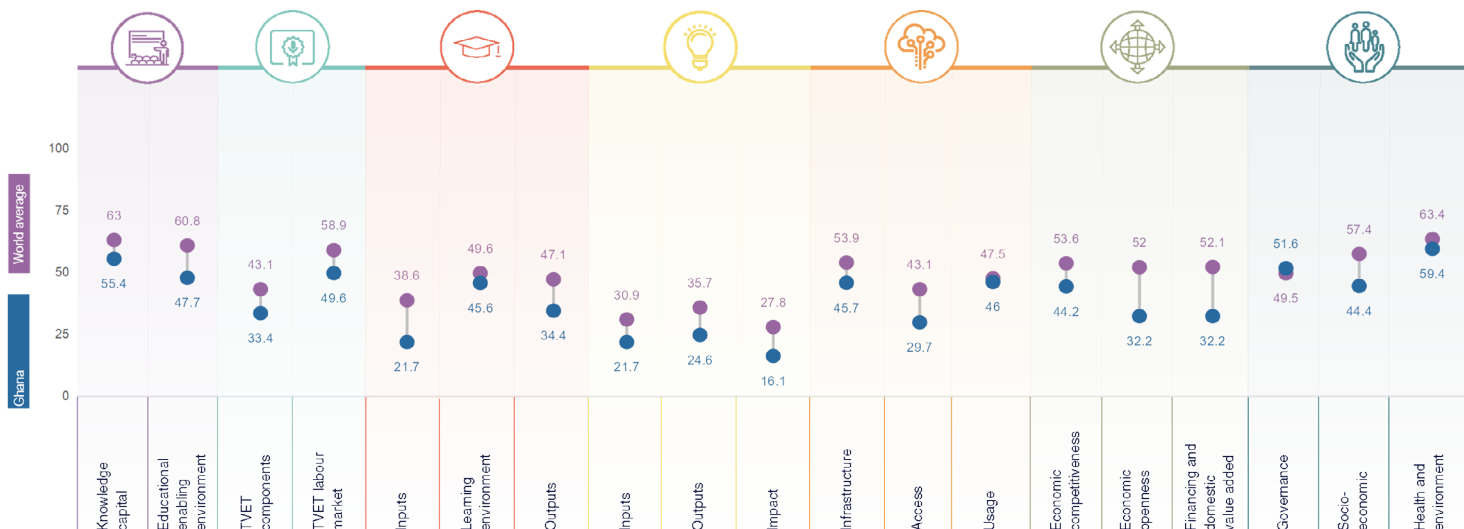
- Chinn-Ito financial openness
- Bank non-performing loans (%)
- Gross fixed capital formation (% GDP)
- Computer software spending (% GDP)
- Enrolment in vocational education, gender parity

SECTORAL INDICES

	RANK	VALUE
PRE-UNIVERSITY EDUCATION	100	51.5
TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	117	41.5
HIGHER EDUCATION	122	33.9
RESEARCH, DEVELOPMENT AND INNOVATION	122	20.8
INFORMATION AND COMMUNICATIONS TECHNOLOGY	94	40.5
ECONOMY	132	36.2
ENABLING ENVIRONMENT	80	51.8



GKI PILLARS





GHANA

	Rank Value	
PRE-UNIVERSITY EDUCATION	100	51.5
Knowledge capital	97	55.4
Enrolment	97	75.2
Net enrolment rate in primary education	109	76.8
Net enrolment rate in lower secondary education	85	87.9
Net enrolment rate in upper secondary education	95	61
Completion	97	55.4
Years of compulsory education in primary and secondary	68	69.2
Completion rate in upper secondary education	76	48
Gross intake ratio to the last grade of lower secondary education	93	49.1
Outcomes	94	35.4
Assessment of 15-year-old students in math, science and reading	n/a	n/a
Learning-adjusted years of schooling	109	35.4
Educational enabling environment	104	47.7
Expenditure	87	27.5
Government expenditure on primary education (% GDP)	92	25
Government expenditure on secondary education (% GDP)	57	32.9
Government funding per primary student (% GDP per capita)	110	15
Government funding per secondary student (% GDP per capita)	53	36.9
Resources	114	57.6
Pupil-trained teacher ratio in primary education	69	73.6
Pupil-trained teacher ratio in secondary education	52	85
Schools with access to computers in primary education (%)	n/a	n/a
Schools with access to computers in secondary education (%)	120	14.3
Early learning	82	53.4
Gross enrolment ratio in early childhood education	69	43.4
Proportion of children who are developmentally on track	39	50.3
Proportion of children with stimulating home learning environments	n/a	n/a
Pupil-trained teacher ratio in pre-primary education	72	66.5
Equity and inclusiveness	79	52.3
Completion rate in upper secondary education, gender parity	77	83.9
Completion rate in upper secondary education, wealth parity	51	21.9
Completion rate in upper secondary education, location parity	76	51.1
TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	117	41.5
TVET components	120	33.4
Continuous training and skilling	73	43.1
Firms offering formal training (%)	23	61
Labour force participation rate with short-cycle tertiary education	92	31.5
Participation rate in formal and non-formal education and training	41	36.7
TVET structure	126	8.9
Government expenditure on vocational education (%)	66	12.9
Share of students enrolled in secondary vocational programmes	105	4.8
Share of students enrolled in post-secondary vocational programmes	n/a	n/a
TVET quality and qualifications	29	48.3
Extent of staff training	67	58
Quality of vocational training	50	57.9
Ratio of high-skill TVET occupations earnings to average wage	24	39.5
Ratio of medium-skill TVET occupations earnings to average wage	25	37.9
TVET labour market	109	49.6
Efficiency of the labour market	35	76.7
Firms constrained with inadequately educated workforce (%)	13	92.6
Employment educational mismatch (%)	77	56.9
Proportion of skilled production workers	37	74.1
Unemployment rate with vocational education	54	83.1
Post-TVET employment	82	41.8
Share of TVET occupations	92	47.5
Manufacturing employment (%)	62	36
Equity and inclusiveness	131	30.4
Enrolment in vocational education, gender parity	114	35.3
Vulnerable employment rate	117	25.5

	Rank Value	
HIGHER EDUCATION	122	33.9
Inputs	122	21.7
Expenditure	97	8.1
Government expenditure per tertiary student	62	8.1
Teaching staff compensation (% tertiary expenditure)	n/a	n/a
Enrolment	102	8.5
Enrolment in bachelor's or equivalent level (%)	97	11.5
Enrolment in master's, doctoral or equivalent (%)	94	5.5
Resources	106	48.6
Pupil-teacher ratio in tertiary education	115	21.7
Researchers in higher education (%)	16	75.4
Learning environment	85	45.6
Diversity and academic freedom	103	38.5
Teachers in tertiary education, gender parity	97	36.5
Inbound mobility rate	96	1.7
Academic freedom	62	77.4
Equity and inclusiveness	25	52.6
Gross attendance ratio for tertiary education, gender parity	43	78.3
Gross attendance ratio for tertiary education, wealth parity	n/a	n/a
Gross attendance ratio for tertiary education, location parity	51	26.9
Outputs	121	34.4
Attainment	115	4.9
Educational attainment rate, bachelor's or equivalent	102	10
Educational attainment rate, master's or equivalent	96	3.5
Educational attainment rate, doctoral or equivalent	106	1.2
Employment	115	65.9
Labour force participation rate with advanced education	133	49.1
Unemployment rate with advanced education	73	82.7
Impact	91	32.2
University-industry collaboration in R&D	57	48.4
Citable documents per R&D personnel in higher education	67	16.1
RESEARCH, DEVELOPMENT AND INNOVATION	122	20.8
Inputs	102	21.7
Inputs of R&D institutions	94	20.7
GERD (% GDP)	n/a	n/a
GERD per researcher	n/a	n/a
Researchers per thousand labour force	88	1.1
Tertiary graduates from STEM programmes (%)	95	40.3
Inputs of RDI in business enterprises	91	16.1
GERD performed by business enterprises (%)	n/a	n/a
GERD financed by business enterprises (%)	n/a	n/a
Researchers in business enterprises (%)	n/a	n/a
Firms that spend on R&D (%)	77	16.1
Inputs of societal innovation	85	29.4
High-skilled employment (%)	108	12.5
Intellectual property payments (% total trade)	35	23.8
State of cluster development	49	51.9
Outputs	125	24.6
Outputs of R&D institutions	115	26.4
Average documents per researcher	45	23.6
Citations per document	68	37.4
Resident patent applications (per 100 billion GDP)	127	18.2
Outputs of RDI in business enterprises	80	24.9
Intellectual property receipts (% total trade)	63	12.7
Industrial design applications (per 100 billion GDP)	47	61.7
PCT applications (per 100 billion GDP)	120	0.2
Firms producing new products and services (%)	77	25
Outputs of societal innovation	121	20.6
Trademark applications (per 100 billion GDP)	132	1.2
Cultural goods exports (% exports)	124	29.1
Printing and publishing output (% manufactured output)	21	31.5
Impact	125	16.1
Quality	101	14.4
Research institutions prominence	73	7.3
Growth of innovative companies	83	44.9
ISO 9001 quality certificates (per billion GDP)	112	2.2
ISO 14001 environmental certificates (per billion GDP)	93	3.4
Linkages	124	2.8
GERD financed from abroad (%)	n/a	n/a
Joint ventures per strategic alliance deals (per billion GDP)	73	4.8
Computer software spending (% GDP)	125	0.8
Business development	103	30.9
New business density per thousand population	86	5.3
Firms with products and services new to the market (%)	85	56.5



GHANA

	Rank Value	
INFORMATION AND COMMUNICATIONS TECHNOLOGY	94	40.5
Infrastructure	98	45.7
Coverage	110	48.8
3G/4G mobile network coverage (% population)	49	99.1
Secure Internet servers per 1 million population	115	31
Investment in telecommunication services (% GDP)	97	16.4
Quality	95	9.5
Mobile upload and download speeds	134	4
Fixed-broadband upload and download speeds	81	15
Fixed-broadband subscriptions by speed per hundred people	n/a	n/a
Affordability	83	78.7
Fixed broadband basket (% GNI per capita)	110	50.8
Mobile broadband basket (% GNI per capita)	97	85.3
Internet and telephony competition	1	100
Access	105	29.7
Subscriptions	108	43.8
Active mobile-broadband subscriptions per hundred inhabitants	118	26.9
International Internet bandwidth per user	99	51.9
Households with Internet access at home (%)	107	52.6
Skills and employment	97	15.5
Individuals with standard ICT skills (%)	n/a	n/a
Tertiary graduates from ICT programmes (%)	64	28.5
ICT employment (%)	108	2.6
Usage	74	46
Services	98	39.9
Government online services	83	60.8
Fixed broadband Internet traffic per subscription	85	14.7
Mobile broadband Internet traffic per subscription	69	17.6
Internet users (%)	97	66.5
Outcomes	52	52.2
ICT PCT patent applications (per 100 billion GDP)	89	33.8
E-participation	78	53.4
Internet activities by individuals (%)	n/a	n/a
Trade in digitally deliverable services (% total trade)	11	69.3
ECONOMY	132	36.2
Economic competitiveness	105	44.2
Infrastructure investment	127	37.2
Gross fixed capital formation (% GDP)	131	17.5
Logistics performance	100	37.5
Transport productive capacity	120	20.3
Building quality control	74	73.3
Business agility	83	51.3
Ease of starting a business	94	85
Insolvency recovery rate	102	26.1
Entrepreneurial employee activity rate	n/a	n/a
Extent of corporate transparency	88	42.9
Economic openness	133	32.2
Trade and diversification	120	41.2
Trade (% GDP)	85	14.6
High-technology trade (% total trade)	124	6.8
Product concentration	126	52.2
Market concentration	62	91.1
Financial openness	135	23.3
Chinn-Ito financial openness	131	0
Foreign direct investment, net inflows (% GDP)	78	39.8
Debt dynamics	115	30
Financing and domestic value added	135	32.2
Financing and taxes	137	30.8
Domestic credit to private sector (% GDP)	132	4
MSME financing gap (% GDP)	35	82.9
Tax and contribution rate (% profit)	127	36.3
Bank non-performing loans (%)	114	0
Domestic value added	116	33.5
Medium- and high-tech activities value added	100	11.5
Industry and services value added (% GDP)	120	55.3
Labour underutilization rate	91	62.6
Output per worker	115	4.8

	Rank Value	
ENABLING ENVIRONMENT	80	51.8
Governance	56	51.6
Political environment	58	51.6
Peace and stability	71	43.9
Voice and accountability	51	59.4
Quality of institutions	62	51.6
Rule of law	65	51.4
Control of corruption	62	52.8
Government effectiveness	73	50.5
Socio-economic	108	44.4
Gender equity	120	53.6
Female-to-male ratio in parliament	118	17.1
Female-to-male labour force participation	14	90
Female-to-male ratio in Internet usage	n/a	n/a
Social inclusion	112	45.4
Social protection coverage (% population)	96	23.3
Adult literacy rate	85	73
Youth not in employment, education or training (%)	113	39.8
Standard of living	89	34.2
Poverty headcount ratio (% population)	68	63.9
GDP per capita	107	4.5
Health and environment	104	59.4
Health	114	52.8
Universal health coverage	118	47.8
Healthy life expectancy (years)	111	45.7
Under-five mortality rate	117	64.9
Environmental performance	36	66.1
Renewable energy consumption (%)	48	40.5
Ecological footprint per capita	44	89.8
Natural hazard exposure	46	68

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