



COSTA RICA

KEY INDICATORS

GDP (US\$ billions): 113.912
Population: 5,153,957
HDI: 0.809

GKI RANK 70 /133

GKI SCORE 46.4
WORLD AVERAGE 47.5

COUNTRY PERFORMANCE SUMMARY

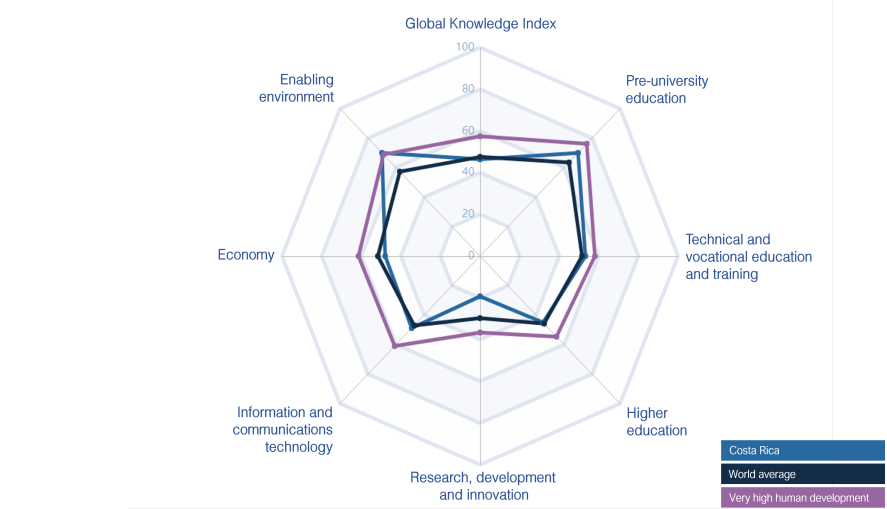
Costa Rica is a moderate performer in terms of its knowledge infrastructure. It ranks 70th out of 133 countries in the Global Knowledge Index 2023 and 59th out of the 61 countries with very high human development.

- ### AREAS OF STRENGTH
- + Female-to-male ratio in parliament
 - + Intellectual property payments (% total trade)
 - + Peace and stability
 - + Pupil-trained teacher ratio in primary education
 - + International Internet bandwidth per user

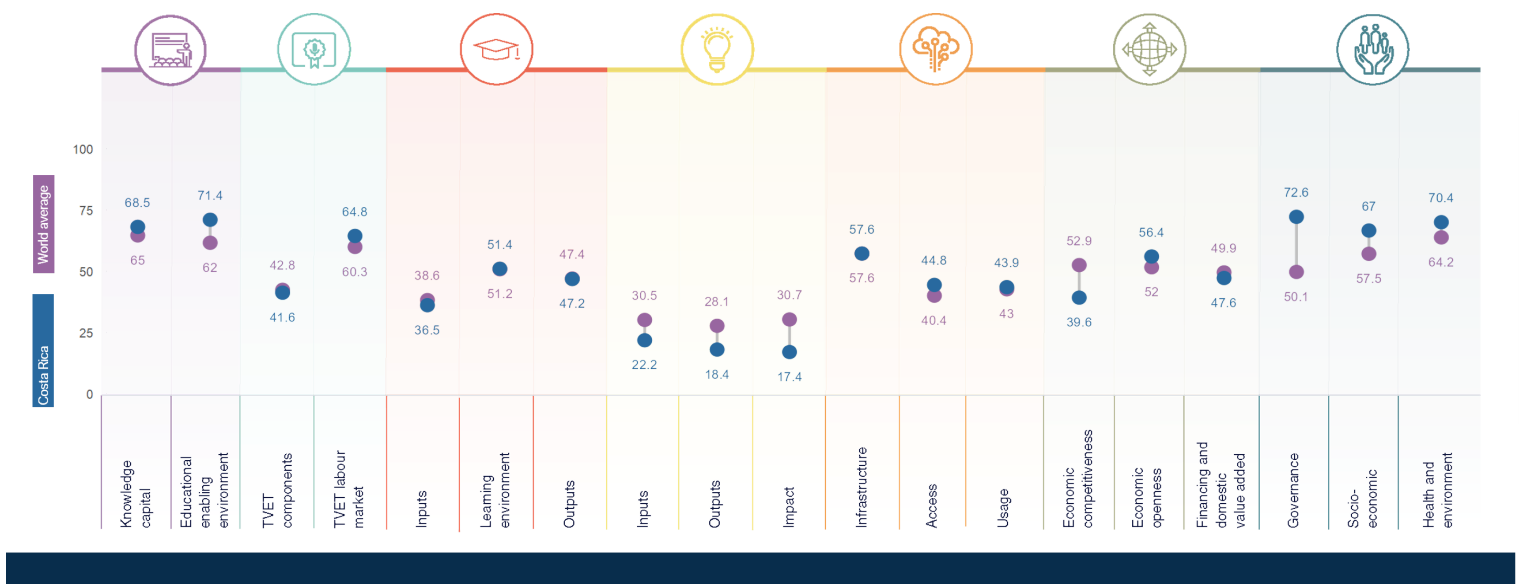
- ### AREAS OF IMPROVEMENT
- Industrial design applications (per 100 billion GDP)
 - Tax and contribution rate (% profit)
 - Entrepreneurial employee activity rate
 - Unemployment rate with vocational education
 - GERD financed by business enterprises (%)

SECTORAL INDICES

	RANK	VALUE
PRE-UNIVERSITY EDUCATION	62	70
TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	60	53.2
HIGHER EDUCATION	69	45
RESEARCH, DEVELOPMENT AND INNOVATION	117	19.3
INFORMATION AND COMMUNICATIONS TECHNOLOGY	67	48.8
ECONOMY	77	47.9
ENABLING ENVIRONMENT	28	70



GKI PILLARS



COSTA RICA

	Rank Value			Rank Value	
PRE-UNIVERSITY EDUCATION	62	70	HIGHER EDUCATION	69	45
Knowledge capital	74	68.5	Inputs	80	36.5
Enrolment	65	88.9	Expenditure	82	16.4
Net enrolment rate in primary education	79	89.4	Government expenditure per tertiary student	41	16.4
Net enrolment rate in lower secondary education	80	90.2	Teaching staff compensation (% tertiary expenditure)	n/a	n/a
Net enrolment rate in upper secondary education	50	87	Enrolment	66	22.4
Completion	82	67.3	Enrolment in bachelor's or equivalent level (%)	38	35.2
Years of compulsory education in primary and secondary	30	84.6	Enrolment in master's, doctoral or equivalent (%)	78	9.7
Completion rate in upper secondary education	64	69.6	Resources	40	70.5
Gross intake ratio to the last grade of lower secondary education	92	47.6	Pupil-teacher ratio in tertiary education	n/a	n/a
Outcomes	65	49.5	Researchers in higher education (%)	25	70.5
Assessment of 15-year-old students in math, science and reading	57	36.3	Learning environment	65	51.4
Learning-adjusted years of schooling	54	62.7	Diversity and academic freedom	74	48.4
Educational enabling environment	48	71.4	Teachers in tertiary education, gender parity	n/a	n/a
Expenditure	21	47.9	Inbound mobility rate	86	4.1
Government expenditure on primary education (% GDP)	17	51.9	Academic freedom	18	92.8
Government expenditure on secondary education (% GDP)	16	47	Equity and inclusiveness	20	54.4
Government funding per primary student (% GDP per capita)	29	56.7	Gross attendance ratio for tertiary education, gender parity	34	81.5
Government funding per secondary student (% GDP per capita)	43	36.1	Gross attendance ratio for tertiary education, wealth parity	31	14.1
Resources	49	93	Gross attendance ratio for tertiary education, location parity	9	67.6
Pupil-trained teacher ratio in primary education	9	94.9	Outputs	67	47.2
Pupil-trained teacher ratio in secondary education	26	93.5	Attainment	58	21
Schools with access to computers in primary education (%)	42	96.8	Educational attainment rate, bachelor's or equivalent	44	44.7
Schools with access to computers in secondary education (%)	76	86.8	Educational attainment rate, master's or equivalent	48	10.8
Early learning	52	67.7	Educational attainment rate, doctoral or equivalent	60	7.5
Gross enrolment ratio in early childhood education	86	28.4	Employment	81	74.5
Proportion of children who are developmentally on track	11	79.7	Labour force participation rate with advanced education	88	70.2
Proportion of children with stimulating home learning environments	n/a	n/a	Unemployment rate with advanced education	81	78.7
Pupil-trained teacher ratio in pre-primary education	13	95	Impact	41	46.2
Equity and inclusiveness	64	77.2	University-industry collaboration in R&D	67	46.2
Completion rate in upper secondary education, gender parity	71	91.1	Citable documents per R&D personnel in higher education	n/a	n/a
Completion rate in upper secondary education, wealth parity	26	53.6	RESEARCH, DEVELOPMENT AND INNOVATION	117	19.3
Completion rate in upper secondary education, location parity	39	86.7	Inputs	91	22.2
TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	60	53.2	Inputs of R&D institutions	97	19.1
TVET components	66	41.6	GERD (% GDP)	67	6.8
Continuous training and skilling	81	37.8	GERD per researcher	27	26
Firms offering formal training (%)	n/a	n/a	Researchers per thousand labour force	77	4.3
Labour force participation rate with short-cycle tertiary education	n/a	n/a	Tertiary graduates from STEM programmes (%)	97	39.5
Participation rate in formal and non-formal education and training	20	37.8	Inputs of RDI in business enterprises	123	2.4
TVET structure	74	42.2	GERD performed by business enterprises (%)	54	3.3
Government expenditure on vocational education (%)	24	47.7	GERD financed by business enterprises (%)	91	1.6
Share of students enrolled in secondary vocational programmes	30	36.7	Researchers in business enterprises (%)	n/a	n/a
Share of students enrolled in post-secondary vocational programmes	n/a	n/a	Firms that spend on R&D (%)	n/a	n/a
TVET quality and qualifications	48	44.9	Inputs of societal innovation	22	48.1
Extent of staff training	29	65.9	High-skilled employment (%)	83	22.5
Quality of vocational training	28	64.2	Intellectual property payments (% total trade)	7	69.4
Ratio of high-skill TVET occupations earnings to average wage	35	27.7	State of cluster development	47	52.4
Ratio of medium-skill TVET occupations earnings to average wage	98	21.8	Outputs	110	18.4
TVET labour market	59	64.8	Outputs of R&D institutions	107	24.8
Efficiency of the labour market	93	62.3	Average documents per researcher	39	24.1
Firms constrained with inadequately educated workforce (%)	n/a	n/a	Citations per document	84	26.9
Employment educational mismatch (%)	51	66.3	Resident patent applications (per 100 billion GDP)	113	23.3
Proportion of skilled production workers	n/a	n/a	Outputs of RDI in business enterprises	129	0.6
Unemployment rate with vocational education	118	58.2	Intellectual property receipts (% total trade)	77	1
Post-TVET employment	55	49.6	Industrial design applications (per 100 billion GDP)	120	0.1
Share of TVET occupations	60	58.4	PCT applications (per 100 billion GDP)	98	0.5
Manufacturing employment (%)	61	40.9	Firms producing new products and services (%)	n/a	n/a
Equity and inclusiveness	38	82.4	Outputs of societal innovation	48	23.4
Enrolment in vocational education, gender parity	24	89	Trademark applications (per 100 billion GDP)	20	46.7
Vulnerable employment rate	64	75.7	Cultural goods exports (% exports)	90	2.4
			Printing and publishing output (% manufactured output)	38	21
			Impact	124	17.4
			Quality	90	24.4
			Research institutions prominence	90	38.7
			Growth of innovative companies	102	42.1
			ISO 9001 quality certificates (per billion GDP)	75	8.4
			ISO 14001 environmental certificates (per billion GDP)	67	8.5
			Linkages	81	13
			GERD financed from abroad (%)	83	4.1
			Joint ventures per strategic alliance deals (per billion GDP)	81	3.8
			Computer software spending (% GDP)	30	31.1
			Business development	117	14.8
			New business density per thousand population	39	14.8
			Firms with products and services new to the market (%)	n/a	n/a



COSTA RICA

	Rank	Value		Rank	Value
INFORMATION AND COMMUNICATIONS TECHNOLOGY			ENABLING ENVIRONMENT		
Infrastructure	67	48.8	Governance	29	72.6
Coverage	60	63.9	Political environment	15	82.8
3G/4G mobile network coverage (% population)	87	91.9	Peace and stability	10	83.5
Secure Internet servers per 1 million population	65	57.3	Voice and accountability	23	82.1
Investment in telecommunication services (% GDP)	40	42.4	Quality of institutions	51	62.4
Quality	75	17.3	Rule of law	43	67
Mobile upload and download speeds	84	7.4	Control of corruption	62	55.7
Fixed-broadband upload and download speeds	76	5.6	Government effectiveness	45	64.6
Fixed-broadband subscriptions by speed per hundred people	60	38.8	Socio-economic	40	67
Affordability	55	91.7	Gender equity	11	86.3
Fixed broadband basket (% GNI per capita)	51	88.8	Female-to-male ratio in parliament	6	90
Mobile broadband basket (% GNI per capita)	72	92.5	Female-to-male labour force participation	93	68.8
Internet and telephony competition	83	93.8	Female-to-male ratio in Internet usage	1	100
Access	56	44.8	Social inclusion	50	74.4
Subscriptions	44	62	Social protection coverage (% population)	52	59.4
Active mobile-broadband subscriptions per hundred inhabitants	61	39.7	Adult literacy rate	31	97.3
International Internet bandwidth per user	16	63.1	Youth not in employment, education or training (%)	56	66.7
Households with Internet access at home (%)	65	83	Standard of living	72	40.4
Skills and employment	66	27.6	Poverty headcount ratio (% population)	72	62.2
Individuals with standard ICT skills (%)	n/a	n/a	GDP per capita	59	18.5
Tertiary graduates from ICT programmes (%)	45	33.8	Health and environment	29	70.4
ICT employment (%)	49	21.5	Health	32	88
Usage	62	43.9	Universal health coverage	34	81.1
Services	74	48.2	Healthy life expectancy (years)	30	87.8
Government online services	68	68.1	Under-five mortality rate	54	95
Fixed broadband Internet traffic per subscription	35	30.7	Environmental performance	66	52.8
Mobile broadband Internet traffic per subscription	75	12.4	Renewable energy consumption (%)	47	37.9
Internet users (%)	64	81.5	Ecological footprint per capita	65	81.5
Outcomes	51	39.6	Natural hazard exposure	109	39
ICT PCT patent applications (per 100 billion GDP)	92	0.9			
E-participation	64	55.7			
Internet activities by individuals (%)	n/a	n/a			
Trade in digitally deliverable services (% total trade)	17	62.2			
ECONOMY	77	47.9			
Economic competitiveness	110	39.6			
Infrastructure investment	76	46.7			
Gross fixed capital formation (% GDP)	105	13.4			
Logistics performance	65	47.5			
Transport productive capacity	50	52.4			
Building quality control	69	73.3			
Business agility	125	32.6			
Ease of starting a business	111	79.9			
Insolvency recovery rate	88	32.1			
Entrepreneurial employee activity rate	76	4.2			
Extent of corporate transparency	102	14.3			
Economic openness	58	56.4			
Trade and diversification	55	52.9			
Trade (% GDP)	78	15.2			
High-technology trade (% total trade)	35	34.2			
Product concentration	66	74.4			
Market concentration	79	87.9			
Financial openness	59	60			
Chinn-Ito financial openness	1	100			
Foreign direct investment, net inflows (% GDP)	26	39.9			
Debt dynamics	91	40			
Financing and domestic value added	76	47.6			
Financing and taxes	57	60.5			
Domestic credit to private sector (% GDP)	59	18			
MSME financing gap (% GDP)	17	88			
Tax and contribution rate (% profit)	122	48.8			
Bank non-performing loans (%)	40	87.1			
Domestic value added	87	34.7			
Medium- and high-tech activities value added	87	17			
Industry and services value added (% GDP)	35	54.8			
Labour underutilization rate	110	46.7			
Output per worker	58	20.4			

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