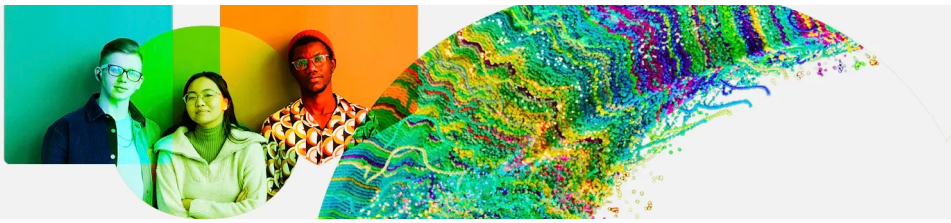
Global Innovation Index 2024



Cameroon ranking in the Global Innovation Index 2024

Cameroon ranks 123rd among the 133 economies featured in the GII 2024.

The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.

Cameroon ranks 34th among the 38 lower-middle-income group economies.

Cameroon ranks 19th among the 27 economies in Sub-Saharan Africa.

Cameroon GII Ranking (2020-2024)

The table shows the rankings of Cameroon over the past four years. Data availability and changes to the GII model framework influence year-on-year comparisons of the GII rankings. The statistical confidence interval for the ranking of Cameroon in the GII 2024 is between ranks 118 and 125.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	119th	120th	119th
2021	123rd	124th	117th
2022	121st	124th	114th
2023	123rd	123rd	117th
2024	123rd	120th	120th

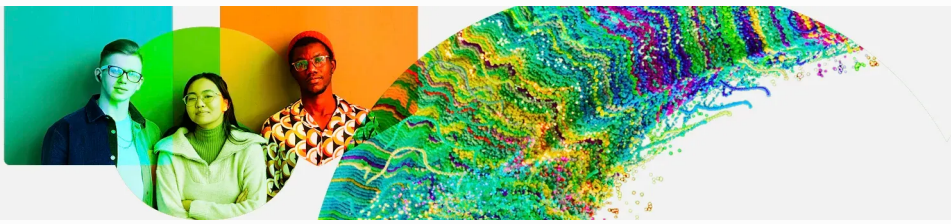
Cameroon performs the same in innovation outputs as in innovation inputs in 2024.

This year **Cameroon ranks 120th in innovation inputs.** This position is higher than last year.

Cameroon ranks 120th in innovation outputs. This position is lower than last year.

Cameroon has no clusters in the top 100 S&T clusters of the Global Innovation Index.

Global Innovation Index 2024



> Global Innovation Tracker

The Global Innovation Tracker 2024 shows what is the current state of innovation in Cameroon, how rapidly is technology being embraced and what are the resulting societal impacts.

For Cameroon, 4 indicators have improved in the short-term and 4 indicators have worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture capital		International patent filings
		Deal numbers	Deal values	
▼ -5.2% 2022 - 2023	n/a	▲ 200% 2022 - 2023	▼ -73.9% 2022 - 2023	▲ 25% 2022 - 2023
▲ 9.1% 2013 - 2023	n/a	n/a	n/a	▲ 17.5% 2013 - 2023

Technology adoption

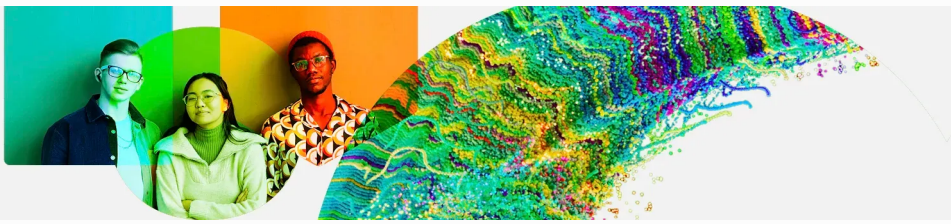
Safe sanitation	Connectivity		Robots	Electric vehicles
	Fixed broadband	5G		
n/a	▼ -2.3% 2021 - 2022	n/a	n/a	n/a
n/a	▲ 41.8% 2012 - 2022		n/a	n/a
n/a	2.2 per 100 inhabitants in 2022	n/a		n/a

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▲ 0.8% 2022 - 2023	▲ 1% 2021 - 2022	▲ 1.1°C 2023
▲ 1.9% 2013 - 2023	▲ 0.5% 2012 - 2022	n/a
13,162 USD in 2023	61 years in 2022	

Notes: Not all indicators of the Global Innovation Tracker are used to calculate the Global Innovation Index. Long-term annual growth refers to the compound annual growth rate (CAGR) over the indicated period. For each variable, a one-year growth rate is set for the short run, and ten-year CAGR is set for the long run; time windows might differ when gaps exist in data availability. The end period corresponds to the most recent available observation, which may differ among countries. Temperature change is an exception: it indicates the change in degrees Celsius with respect to the average temperature in the country from 1951–1980. Figures are rounded.

Global Innovation Index 2024

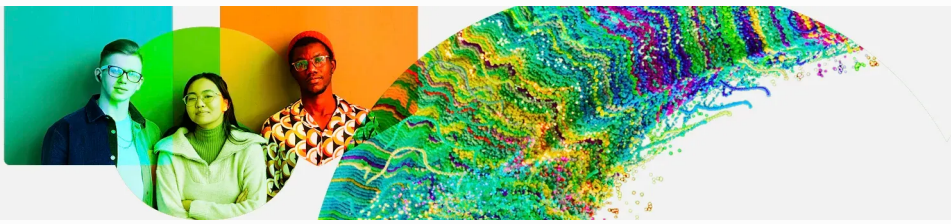


Expected vs. observed innovation performance

The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected and those below are performing below expectations.

Relative to GDP, Cameroon's performance is below expectations for its level of development.

> Innovation overperformers relative to their economic development



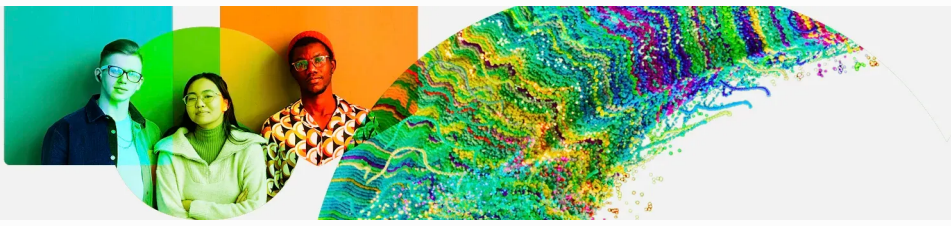
Effectively translating innovation investments into innovation outputs

The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.

Cameroon produces less innovation outputs relative to its level of innovation investments.

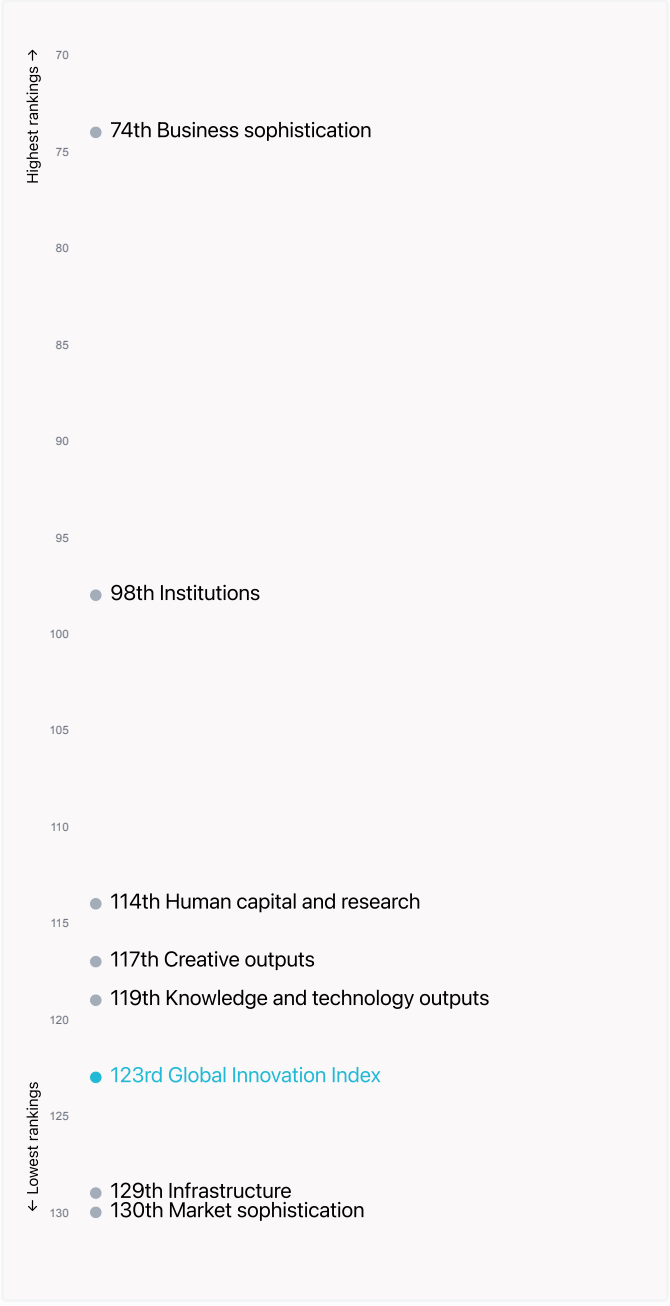
> Relationship between innovation inputs and outputs

Global Innovation Index 2024



Overview of Cameroon's rankings in the seven areas of the GII in 2024

The chart shows the ranking for each of the seven areas that the GII comprises. The strongest areas for Cameroon are those that rank above the GII (shown in blue) and the weakest are those that rank below.



Highest rankings

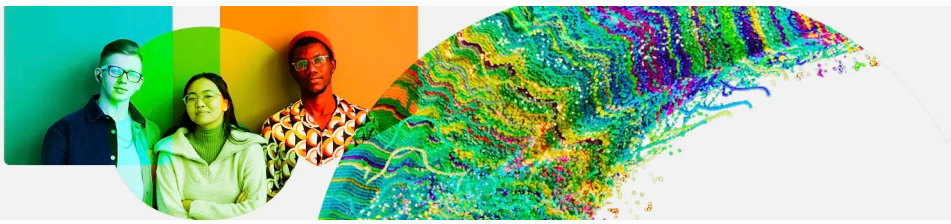
Cameroon ranks highest in Business sophistication (74th), Institutions (98th), Human capital and research (114th) and Creative outputs (117th).

Lowest rankings

Cameroon ranks lowest in Market sophistication (130th), Infrastructure (129th) and Knowledge and technology outputs (119th).

The full WIPO Intellectual Property Statistics profile for Cameroon can be found on this link.

Global Innovation Index 2024



Benchmark of Cameroon against other economy groupings for each of the seven areas of the GII Index

The charts shows the relative position of Cameroon (blue bar) against other economy groupings (grey bars), for each of the seven areas of the GII Index.

Lower-Middle-Income economies

Cameroon performs above the lower-middle-income group average in Business sophistication.

Sub-Saharan Africa

Cameroon performs above the regional average in Business sophistication.

Institutions

- Top 10 | Score: 80.81
- Sub-Saharan Africa | Score: 37.83
- Lower middle income | Score: 34.0
- Cameroon | Score: 33.53

Human capital and research

- Top 10 | Score: 61.30
- Lower middle income | Score: 22.1
- Sub-Saharan Africa | Score: 17.86
- Cameroon | Score: 16.50

Infrastructure

- Top 10 | Score: 58.57
- Lower middle income | Score: 29.8
- Sub-Saharan Africa | Score: 25.40
- Cameroon | Score: 18.47

Market sophistication

- Top 10 | Score: 62.12
- Lower middle income | Score: 25.9
- Sub-Saharan Africa | Score: 18.79
- Cameroon | Score: 10.51

Business sophistication

- Top 10 | Score: 63.64
- Cameroon | Score: 24.55
- Lower middle income | Score: 20.8
- Sub-Saharan Africa | Score: 18.73

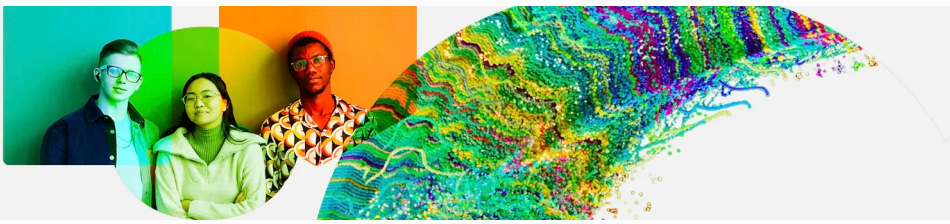
Knowledge and technology outputs

- Top 10 | Score: 57.29
- Lower middle income | Score: 15.6
- Sub-Saharan Africa | Score: 10.99
- Cameroon | Score: 9.60

Creative outputs

- Top 10 | Score: 56.54
- Lower middle income | Score: 15.7
- Sub-Saharan Africa | Score: 10.35
- Cameroon | Score: 6.67

Global Innovation Index 2024



Innovation strengths and weaknesses in Cameroon

The table below gives an overview of the indicator strengths and weaknesses of Cameroon in the GII 2024.

Cameroon's main innovation strengths are **Low-carbon energy use, %** (rank 22), **Loans from microfinance institutions, % GDP** (rank 30) and **ICT services imports, % total trade** (rank 31).

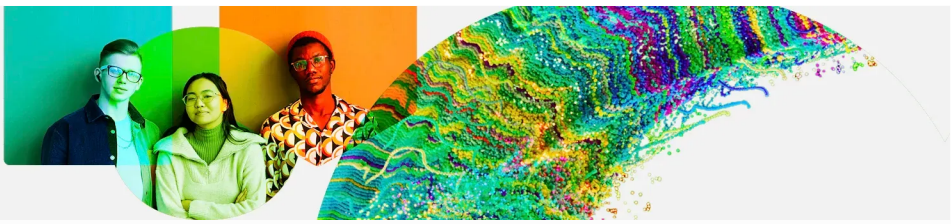
Strengths

Rank	Code	Indicator name
22	3.3.2	Low-carbon energy use, %
30	4.1.3	Loans from microfinance institutions, % GDP
31	5.3.3	ICT services imports, % total trade
53	5.1.1	Knowledge-intensive employment, %
57	5.2.2	University-industry R&D collaboration†
60	6.1.4	Scientific and technical articles/bn PPP$ GDP
77	5.3.4	FDI net inflows, % GDP

Weaknesses

Rank	Code	Indicator name
128	4.3.1	Applied tariff rate, weighted avg., %
126	7.2.4	Creative goods exports, % total trade
122	3.1.2	ICT use*
120	6.3.2	Production and export complexity
110	3.2.2	Logistics performance*
75	7.1.3	Global brand value, top 5,000, % GDP
75	2.3.4	QS university ranking, top 3*
74	6.1.3	Utility models by origin/bn PPP$ GDP
49	6.2.2	Unicorn valuation, % GDP
41	2.3.3	Global corporate R&D investors, top 3, mn USD

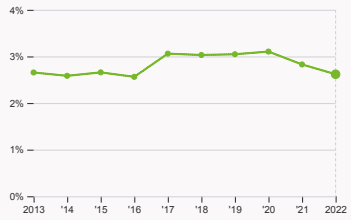
Global Innovation Index 2024



Cameroon's innovation system

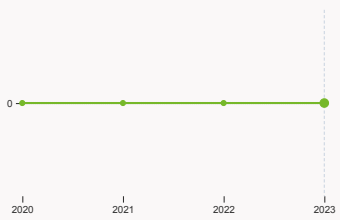
As far as practicable, the plots below present unscaled indicator data.

Innovation inputs in Cameroon



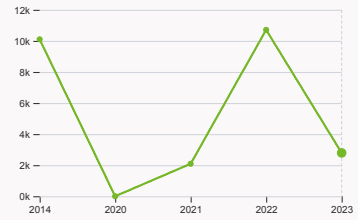
2.1.1 **Expenditure on education**

was equal to 2.62 % GDP in 2022, down by 0.21 percentage points from the year prior – and equivalent to an indicator rank of 110.



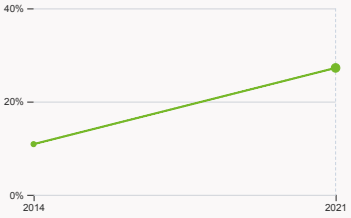
2.3.4 **QS university ranking**

was equal to an average score of 0 for the top three universities in 2023 with no change from the year prior – and equivalent to an indicator rank of 75.



4.2.4 **VC received, value**

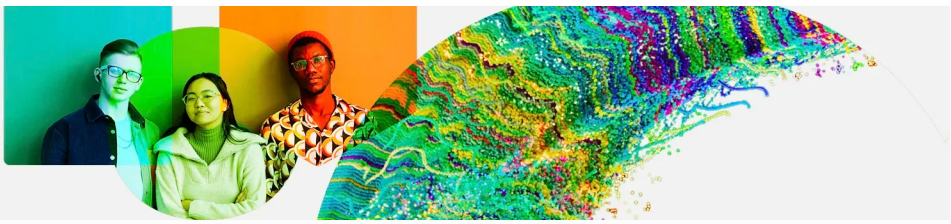
was equal to 2.79 thousand USD in 2023, down by 73.95% from the year prior – and equivalent to an indicator rank of 82.



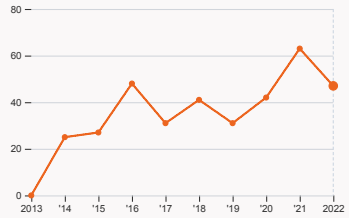
5.1.1 **Knowledge-intensive employment**

was equal to 27.22 % in 2021, up by 16.36 percentage points from the year prior – and equivalent to an indicator rank of 53.

Global Innovation Index 2024

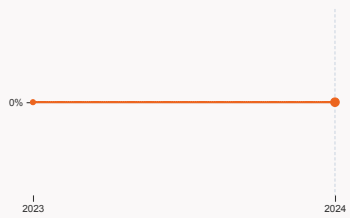


Innovation outputs in Cameroon



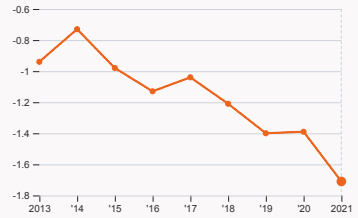
6.1.1 Patents by origin

was equal to 47 patents in 2022, down by 25.4% from the year prior – and equivalent to an indicator rank of 84.



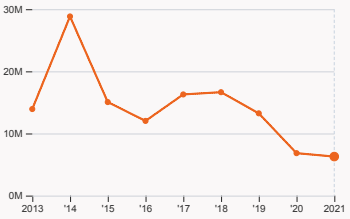
6.2.2 Unicorn valuation

was equal to 0 % GDP in 2024 with no change from the year prior – and equivalent to an indicator rank of 49.



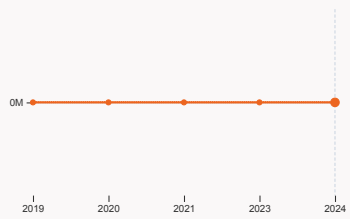
6.3.2 Production and export complexity

was equal to a score of -1.71 in 2021, down by 23.02% from the year prior – and equivalent to an indicator rank of 120.



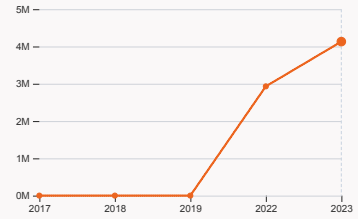
6.3.3 High-tech exports

was equal to 6.28 million USD in 2021, down by 8.05% from the year prior – and equivalent to an indicator rank of 124.



7.1.3 Global brand value

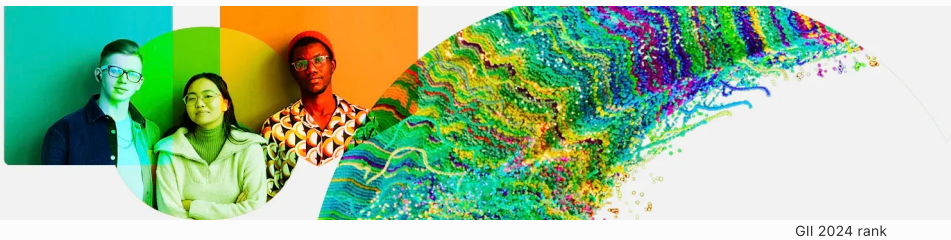
was equal to 0 million USD for the brands in the top 5,000 in 2024 with no change from the year prior – and equivalent to an indicator rank of 75.



7.3.3 Mobile app creation

was equal to 4.13 million global downloads of mobile apps in 2023, up by 40.96% from the year prior – and equivalent to an indicator rank of 95.

Global Innovation Index 2024



Cameroon

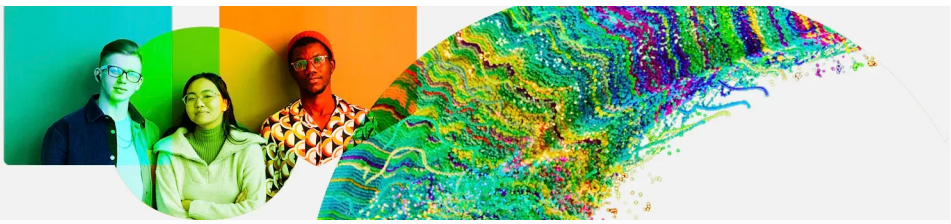
GII 2024 rank **123**

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
120	120	Lower middle	SSA	28.4	133.3	4,660.8

	Score / Value	Rank	
Institutions	**33.5**	**98**	
1.1 Institutional environment	**30.8**	**113**	
1.1.1 Operational stability for businesses*	40.7	110	
1.1.2 Government effectiveness*	21	119	
1.2 Regulatory environment	**16**	**122**	
1.2.1 Regulatory quality*	18.2	117	
1.2.2 Rule of law*	13.9	122	
1.3 Business environment	**53.7**	**51**	●◆
1.3.1 Policy stability for doing business†	44.4	77	
1.3.2 Entrepreneurship policies and culture†	63.1	17	
Human capital and research	**16.5**	**[114]**	
2.1 Education	**42.5**	**[89]**	
2.1.1 Expenditure on education, % GDP	2.6	110	
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a	
2.1.3 School life expectancy, years	12.1	91	
2.1.4 PISA scales in reading, maths and science	n/a	n/a	
2.1.5 Pupil–teacher ratio, secondary	17.2	89	
2.2 Tertiary education	**7**	**118**	◇
2.2.1 Tertiary enrolment, % gross	14.3	109	
2.2.2 Graduates in science and engineering, %	n/a	n/a	
2.2.3 Tertiary inbound mobility, %	2.8	69	
2.3 Research and development (R&D)	**0**	**[120]**	
2.3.1 Researchers, FTE/mn pop.	n/a	n/a	
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a	
2.3.3 Global corporate R&D investors, top 3, mn USD	0	41	○◇
2.3.4 QS university ranking, top 3*	0	75	○◇
Infrastructure	**18.5**	**129**	○◇
3.1 Information and communication technologies (ICTs)	**29.2**	**124**	◇
3.1.1 ICT access*	39.9	116	
3.1.2 ICT use*	17.3	122	○◇
3.1.3 Government's online service*	32.8	118	
3.1.4 E-participation*	26.7	108	
3.2 General infrastructure	**4.7**	**131**	○◇
3.2.1 Electricity output, GWh/mn pop.	291.9	116	
3.2.2 Logistics performance*	0	110	○◇
3.2.3 Gross capital formation, % GDP	18.2	110	◇
3.3 Ecological sustainability	**21.5**	**62**	●◆
3.3.1 GDP/unit of energy use	9.4	81	
3.3.2 Low-carbon energy use, %	36.2	22	●◆
3.3.3 ISO 14001 environment/bn PPP$ GDP	0.4	97	
Market sophistication	**10.5**	**130**	○◇
4.1 Credit	**22.8**	**77**	●◆
4.1.1 Finance for startups and scaleups†	54.5	33	
4.1.2 Domestic credit to private sector, % GDP	14.7	123	
4.1.3 Loans from microfinance institutions, % GDP	1	30	●◆
4.2 Investment	**3.1**	**98**	
4.2.1 Market capitalization, % GDP	n/a	n/a	
4.2.2 Venture capital (VC) investors, deals/bn PPP$ GDP	0.02	83	
4.2.3 VC recipients, deals/bn PPP$ GDP	0.03	82	
4.2.4 VC received, value, % GDP	0.0001	82	
4.3 Trade, diversification and market scale	**5.6**	**133**	○◇
4.3.1 Applied tariff rate, weighted avg., %	11.6	128	○◇
4.3.2 Domestic industry diversification	n/a	n/a	
4.3.3 Domestic market scale, bn PPP$	133.3	84	

	Score / Value	Rank	
Business sophistication	**24.6**	**74**	●◆
5.1 Knowledge workers	**31.4**	**[69]**	
5.1.1 Knowledge-intensive employment, %	27.2	53	●◆
5.1.2 Firms offering formal training, %	37.6	43	
5.1.3 GERD performed by business, % GDP	n/a	n/a	
5.1.4 GERD financed by business, %	n/a	n/a	
5.1.5 Females employed w/advanced degrees, %	2	112	
5.2 Innovation linkages	**19.2**	**87**	
5.2.1 Public Research-Industry co-publications, %	0.7	104	
5.2.2 University-industry R&D collaboration†	47.6	57	●◆
5.2.3 State of cluster development†	39.9	83	
5.2.4 Joint venture/strategic alliance deals/bn PPP$ GDP	0.004	113	
5.2.5 Patent families/bn PPP$ GDP	0.01	95	
5.3 Knowledge absorption	**23.1**	**77**	●◆
5.3.1 Intellectual property payments, % total trade	0.1	101	
5.3.2 High-tech imports, % total trade	5	109	
5.3.3 ICT services imports, % total trade	2	31	●◆
5.3.4 FDI net inflows, % GDP	1.9	77	●◆
5.3.5 Research talent, % in businesses	n/a	n/a	
Knowledge and technology outputs	**9.6**	**119**	
6.1 Knowledge creation	**8**	**92**	
6.1.1 Patents by origin/bn PPP$ GDP	0.4	84	
6.1.2 PCT patents by origin/bn PPP$ GDP	0.04	78	
6.1.3 Utility models by origin/bn PPP$ GDP	0	74	○◇
6.1.4 Scientific and technical articles/bn PPP$ GDP	11.8	60	●◆
6.1.5 Citable documents H-index	7.3	88	
6.2 Knowledge impact	**18.4**	**111**	
6.2.1 Labor productivity growth, %	0.01	94	
6.2.2 Unicorn valuation, % GDP	0	49	○◇
6.2.3 Software spending, % GDP	0.1	90	
6.2.4 High-tech manufacturing, %	n/a	n/a	
6.3 Knowledge diffusion	**2.4**	**127**	○
6.3.1 Intellectual property receipts, % total trade	0.05	74	
6.3.2 Production and export complexity	0	120	○◇
6.3.3 High-tech exports, % total trade	0.08	124	
6.3.4 ICT services exports, % total trade	0.8	91	
6.3.5 ISO 9001 quality/bn PPP$ GDP	1.6	101	
Creative outputs	**6.7**	**117**	
7.1 Intangible assets	**1.6**	**123**	◇
7.1.1 Intangible asset intensity, top 15, %	n/a	n/a	
7.1.2 Trademarks by origin/bn PPP$ GDP	5.2	118	
7.1.3 Global brand value, top 5,000, % GDP	0	75	○◇
7.1.4 Industrial designs by origin/bn PPP$ GDP	0.2	101	
7.2 Creative goods and services	**4.2**	**[104]**	
7.2.1 Cultural and creative services exports, % total trade	0.3	70	
7.2.2 National feature films/mn pop. 15–69	n/a	n/a	
7.2.3 Entertainment and media market/th pop. 15–69	n/a	n/a	
7.2.4 Creative goods exports, % total trade	0.01	126	○
7.3 Online creativity	**19.2**	**102**	
7.3.1 Top-level domains (TLDs)/th pop. 15–69	0.5	105	
7.3.2 GitHub commits/mn pop. 15–69	1.4	111	
7.3.3 Mobile app creation/bn PPP$ GDP	55.8	95	

NOTES: ● indicates a strength; ○ a weakness; ◆ an income group strength; ◇ an income group weakness; * an index; † a survey question, 🕒 that the economy's data is outdated. Square brackets [ ] indicate the the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level; n/a represents missing values; a dash - indicates an indicator which is not relevant to this economy and thus not considered for DMC thresholds.



Data availability

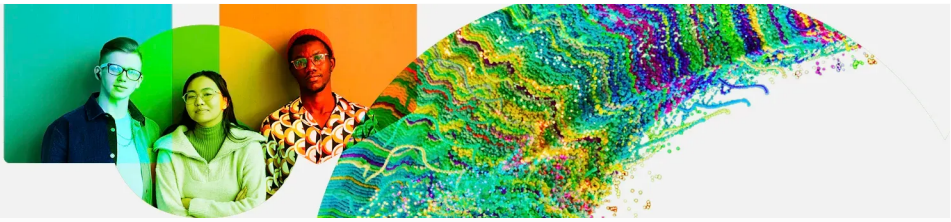
The following tables list indicators that are either missing or outdated for Cameroon.

Cameroon has missing data for fourteen indicators and outdated data for eighteen indicators.

Missing data for Cameroon

Code	Indicator name	Economy Year	Model Year	Source
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2020	UNESCO Institute for Statistics
2.1.4	PISA scales in reading, maths and science	n/a	2022	OECD, PISA
2.2.2	Graduates in science and engineering, %	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD
2.3.1	Researchers, FTE/mn pop.	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
4.2.1	Market capitalization, % GDP	n/a	2022	World Federation of Exchanges; World Bank
4.3.2	Domestic industry diversification	n/a	2021	United Nations Industrial Development Organization (UNIDO), Industrial Statistics Database (INDSTAT) Rev.3 and 4
5.1.3	GERD performed by business, % GDP	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.3.5	Research talent, % in businesses	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
6.2.4	High-tech manufacturing, %	n/a	2021	United Nations Industrial Development Organization
7.1.1	Intangible asset intensity, top 15, %	n/a	2023	Brand Finance
7.2.2	National feature films/mn pop. 15–69	n/a	2022	OMDIA; United Nations, World Population Prospects
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2023	PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund

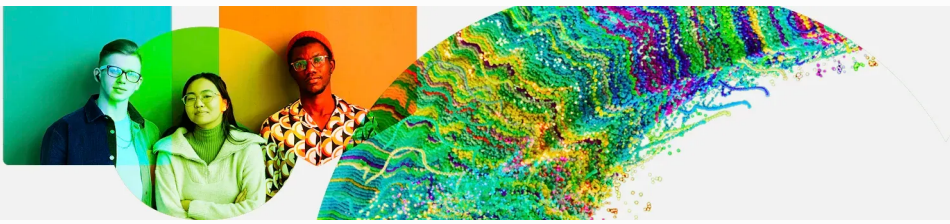
Global Innovation Index 2024



Outdated data for Cameroon

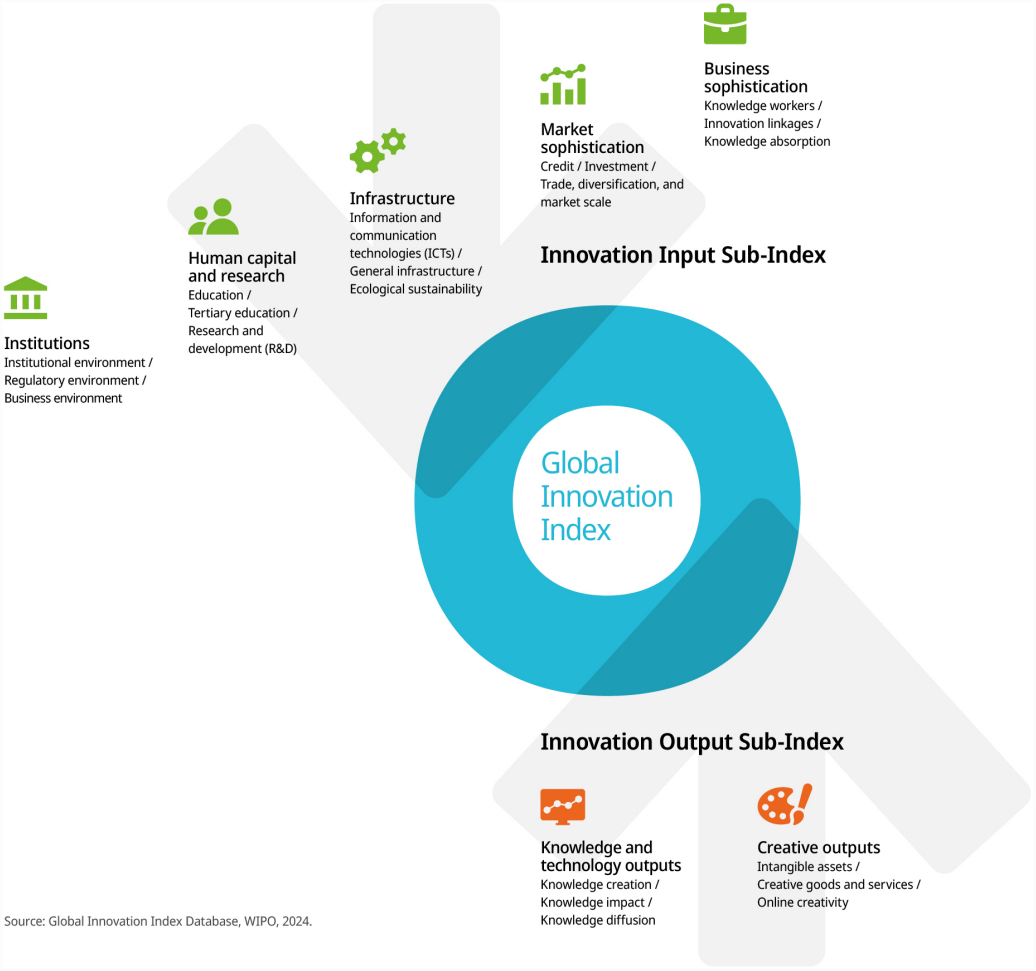
Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture†	2016	2023	Global Entrepreneurship Monitor
2.1.3	School life expectancy, years	2016	2022	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2018	2022	UNESCO Institute for Statistics
2.2.3	Tertiary inbound mobility, %	2018	2022	UNESCO Institute for Statistics
3.1.1	ICT access*	2021	2022	World Intellectual Property Organization; International Telecommunication Union ITU DataHub (accessed May 1st, 2024)
3.2.1	Electricity output, GWh/mn pop.	2021	2022	International Energy Agency
4.1.1	Finance for startups and scaleups†	2016	2023	Global Entrepreneurship Monitor
4.1.2	Domestic credit to private sector, % GDP	2018	2022	International Monetary Fund; World Bank and OECD GDP estimates.
4.1.3	Loans from microfinance institutions, % GDP	2020	2022	International Monetary Fund, Financial Access Survey (FAS)
4.3.1	Applied tariff rate, weighted avg., %	2021	2022	World Trade Organization
5.1.1	Knowledge-intensive employment, %	2021	2022	International Labour Organization
5.1.2	Firms offering formal training, %	2016	2023	World Bank Enterprise Surveys
5.1.5	Females employed w/advanced degrees, %	2014	2023	International Labour Organization
5.3.2	High-tech imports, % total trade	2021	2022	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development
6.1.3	Utility models by origin/bn PPP$ GDP	2021	2022	World Intellectual Property Organization; International Monetary Fund
6.3.3	High-tech exports, % total trade	2021	2022	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development; Trade Data Monitor.
7.2.4	Creative goods exports, % total trade	2021	2022	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development
7.3.1	Top-level domains (TLDs)/th pop. 15–69	2021	2023	ZookNIC Inc.; United Nations Department of Economic and Social Affairs, Population Division, World Population Prospects 2024

Global Innovation Index 2024



About the Global Innovation Index

- The Global Innovation Index (GII) is published by the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations.
- Recognizing that innovation is a key driver of economic development, the GII aims to provide an innovation ranking and rich analysis referencing around 130 economies. Over the last decade, the GII has established itself as both a leading reference on innovation and a "tool for action" for economies that incorporate the GII into their innovation agendas.



Source: Global Innovation Index Database, WIPO, 2024.

The Index is a ranking of the innovation capabilities and results of world economies. It measures innovation based on criteria that include institutions, human capital and research, infrastructure, credit, investment, linkages; the creation, absorption and diffusion of knowledge; and creative outputs.

The GII has two sub-indices: the Innovation Input Sub-Index and the Innovation Output Sub-Index, and seven pillars, each consisting of three sub-pillars.