

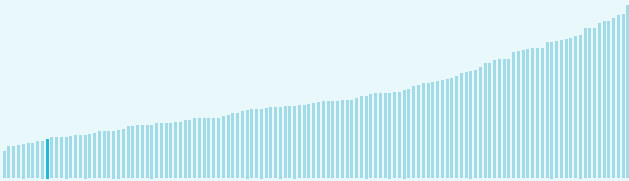
Global Innovation Index 2023



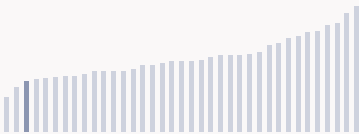
The Global Innovation Index (GII) **ranks world economies according to their innovation capabilities**. Consisting of **roughly 80 indicators**, grouped into innovation inputs and outputs, the **GII aims to capture the multi-dimensional facets of innovation**.

Cameroon ranking in the Global Innovation Index 2023

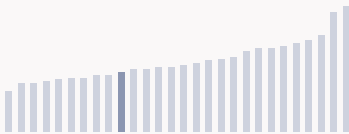
> Cameroon ranks **123rd** among the 132 economies featured in the **GII 2023**.



> Cameroon ranks **35th** among the 37 lower-middle-income group economies.



> Cameroon ranks **19th** among the 28 economies in Sub-Saharan Africa.



> Cameroon GII Ranking (2020-2023)

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 2023** is between ranks 120 and 124.

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

Cameroon performs better in innovation outputs than innovation inputs in 2023.

- This year Cameroon ranks 123rd in innovation inputs. This position is higher than last year.
- Cameroon ranks 117th in innovation outputs. This position is lower than last year.

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→ Expected vs. observed innovation performance

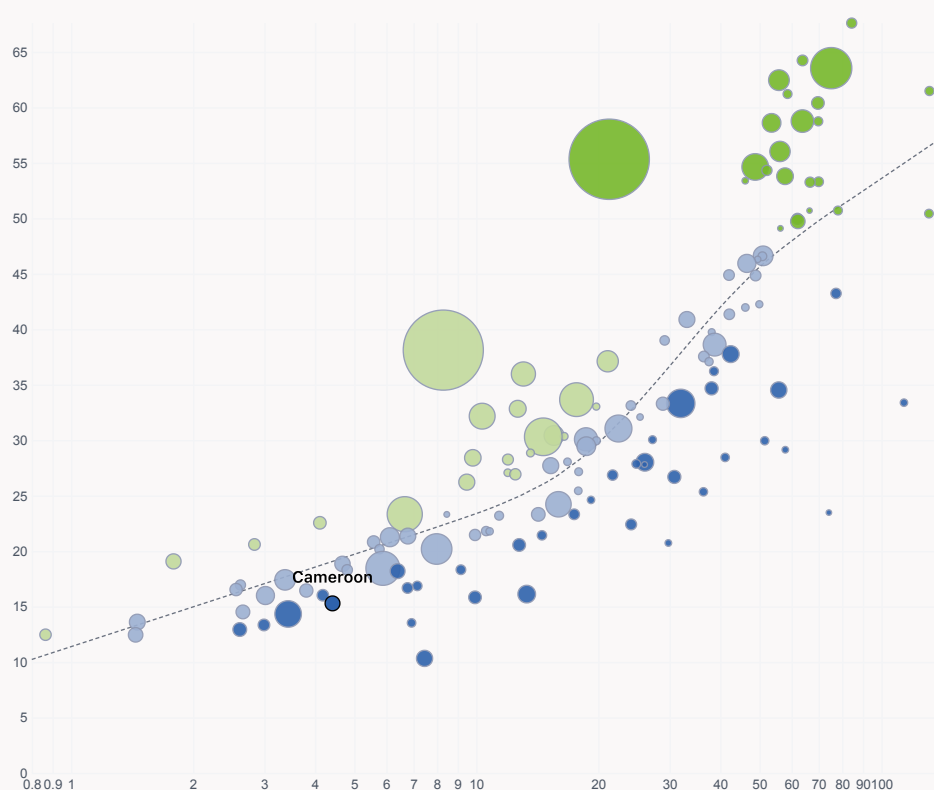
The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected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

↑ **GII Score**



- Innovation leader
- Performing above expectations for level of development
- Performing at expectations for level of development
- Performing below expectations for level of development

Size legend (Population)



→ GDP per capita, PPP logarithmic scale (thousands of \$)

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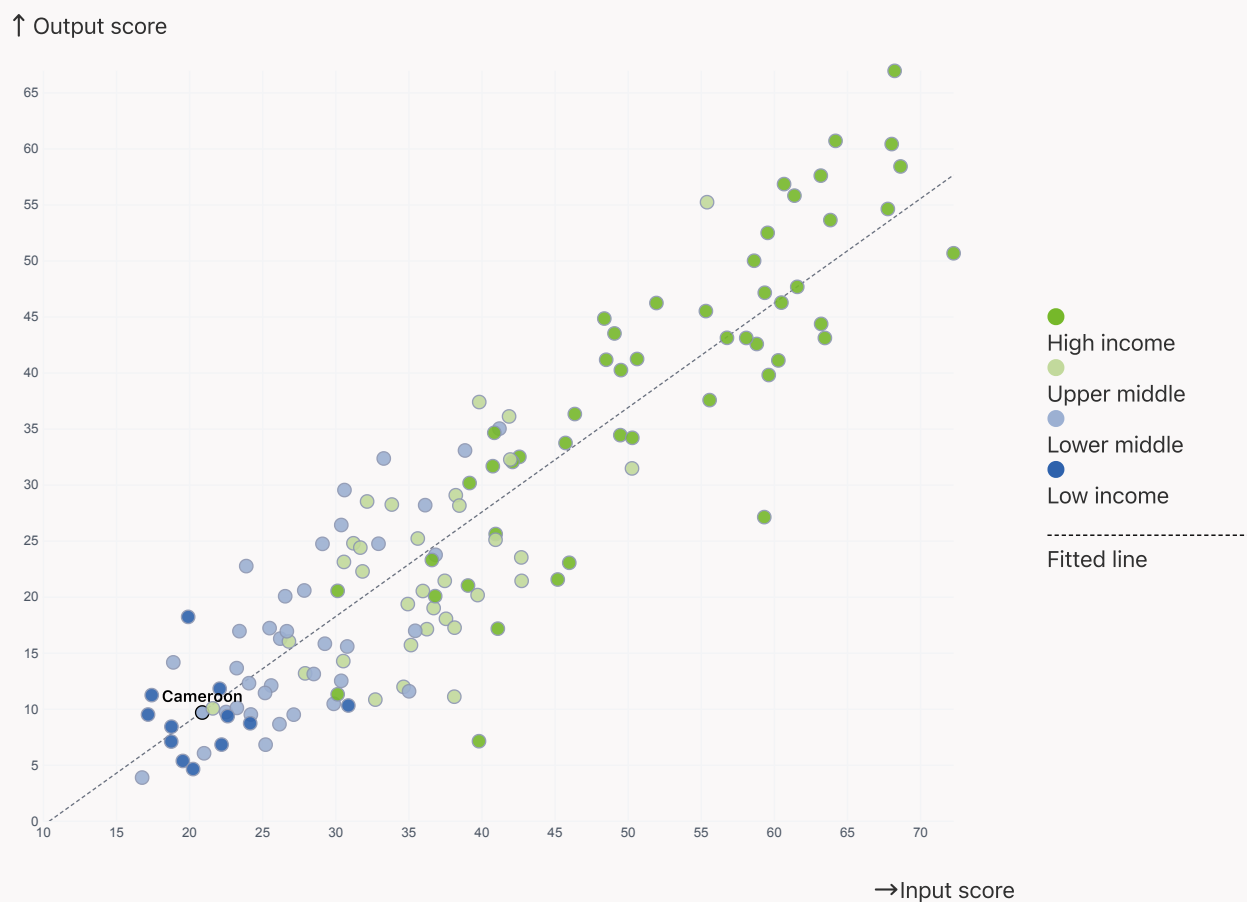
→ Effectively translating innovation investments into innovation outputs

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 more innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs



Global Innovation Index 2023



→ Overview of Cameroon's rankings in the seven areas of the GII in 2023

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 →

- 88th Business sophistication
- 91st Institutions
- 104th Knowledge and technology outputs
- 112nd Human capital and research
- 118th Creative outputs

← Lowest rankings

- 123rd Global Innovation Index
- 129th Market sophistication
- 130th Infrastructure

> Highest rankings



Cameroon ranks highest in Business sophistication (88th), Institutions (91st), Knowledge and technology outputs (104th), Human capital and research (112nd) and Creative outputs (118th).

> Lowest rankings



Cameroon ranks lowest in Infrastructure (130th), Market sophistication (129th) and Creative outputs (118th).



The full WIPO Intellectual Property Statistics profile for Cameroon can be found on [this link](#).

Global Innovation Index 2023



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

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

> Lower-Middle-Income economies

Cameroon performs below the lower-middle-income group average in Knowledge and technology outputs, Creative outputs, Market sophistication, Human capital and research, Infrastructure.



> Sub-Saharan Africa

Cameroon performs below the regional average in Creative outputs, Market sophistication, Human capital and research, Infrastructure, Institutions.



Knowledge and technology outputs

Top 10 | Score: 58.96

Lower middle income | Score: 17.21

Cameroon | Score: 12.87

Sub-Saharan Africa | Score: 12.16

Creative outputs

Top 10 | 56.09

Lower middle income | 16.35

Sub-Saharan Africa | 10.36

Cameroon | 6.43

Business sophistication

Top 10 | 64.39

Cameroon | 23.20

Lower middle income | 22.71

Sub-Saharan Africa | 19.85

Market sophistication

Top 10 | 61.93

Lower middle income | 28.01

Sub-Saharan Africa | 20.00

Cameroon | 8.95

Human capital and research

Top 10 | 60.28

Lower middle income | 21.73

Sub-Saharan Africa | 17.80

Cameroon | 16.17

Infrastructure

Top 10 | 62.83

Lower middle income | 27.83

Sub-Saharan Africa | 23.36

Cameroon | 14.96

Institutions

Top 10 | 79.85

Sub-Saharan Africa | 43.27

Cameroon | 41.27

Lower middle income | 39.43

Global Innovation Index 2023



→ Innovation strengths and weaknesses in Cameroon

The table below gives an overview of the indicator strengths and weaknesses of Cameroon in the GII 2023.



> Cameroon's main innovation strengths are **Loans from microfinance institutions, % GDP** (rank 27), **Firms offering formal training, %** (rank 40) and **ICT services imports, % total trade** (rank 50).

Strengths

Rank	Code	Indicator name	Rank	Code	Indicator name
27	4.1.3	Loans from microfinance institutions, % GDP	132	4.3.1	Applied tariff rate, weighted avg., %
40	5.1.2	Firms offering formal training, %	129	3.1.1	ICT access
50	5.3.3	ICT services imports, % total trade	117	6.3.2	Production and export complexity
51	6.3.4	ICT services exports, % total trade	111	3.2.2	Logistics performance
58	5.2.1	University-industry R&D collaboration	95	5.2.5	Patent families/bn PPP\$ GDP
62	6.1.4	Scientific and technical articles/bn PPP\$ GDP	75	6.1.3	Utility models by origin/bn PPP\$ GDP
64	1.3.1	Policies for doing business	74	7.1.3	Global brand value, top 5,000
69	5.3.4	FDI net inflows, % GDP	71	2.3.4	QS university ranking, top 3
			48	6.2.2	Unicorn valuation, % GDP
			40	2.3.3	Global corporate R&D investors, top 3, mn US\$

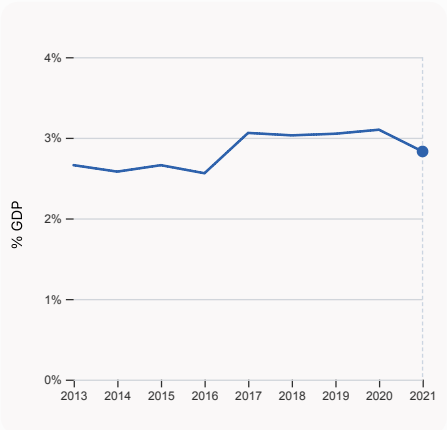
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→ Cameroon's innovation system

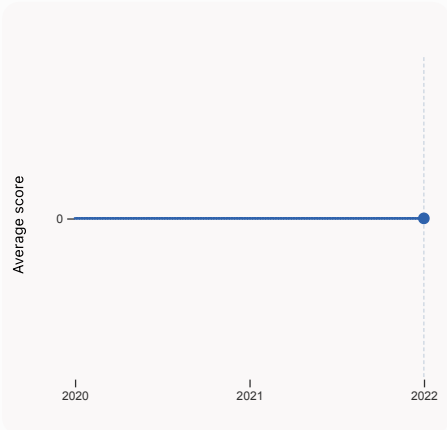
As far as practicable, the plots below present unscaled indicator data.

> Innovation inputs in Cameroon



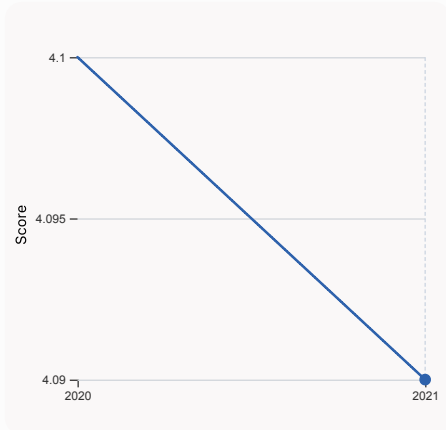
2.1.1 Expenditure on education, % GDP

was equal to 2.83% GDP in 2021, down by 0.27 percentage points from the year prior – and equivalent to an indicator rank of 110.



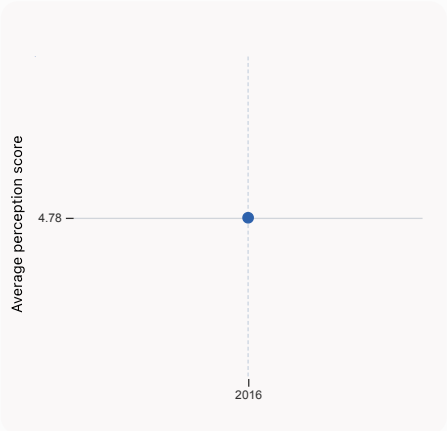
2.3.4 QS university ranking, top 3

was equal to an average score of 0 for the top 3 universities in 2022, equivalent to an indicator rank of 71.



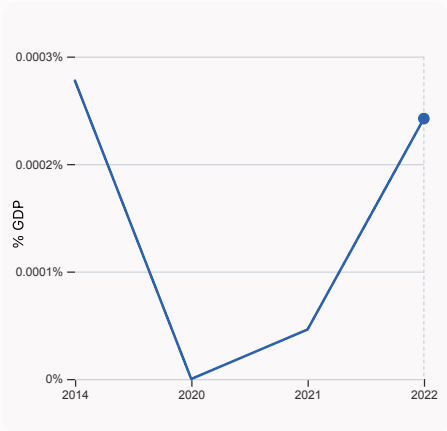
3.1.1 ICT access

was equal to a score of 4.09 in 2021, down by 0.24% from the year prior – and equivalent to an indicator rank of 129.



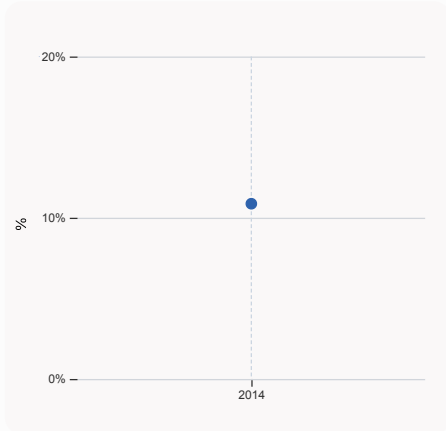
4.1.1 Finance for startups and scaleups

was equal to an average perception score of 4.78 in 2016, equivalent to an indicator rank of 39.



4.2.4 VC received, value, % GDP

was equal to 0.00024% GDP in 2022, up by 0.0002 percentage points from the year prior – and equivalent to an indicator rank of 82.



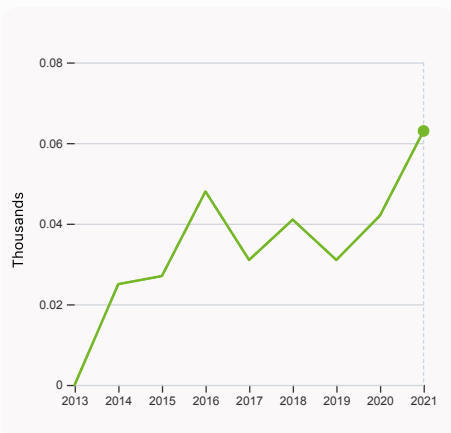
5.1.1 Knowledge-intensive employment, %

was equal to 10.87 % in 2014, equivalent to an indicator rank of 104.

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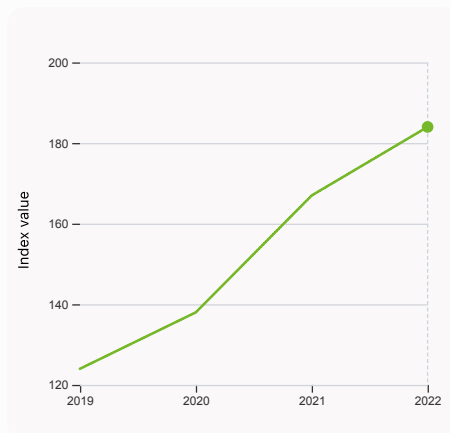


> Innovation outputs in Cameroon



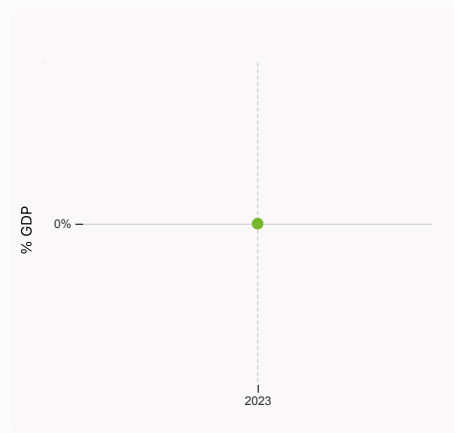
6.1.1 Patents by origin

was equal to 0.063 Thousands in 2021, up by 50% from the year prior – and equivalent to an indicator rank of 75.



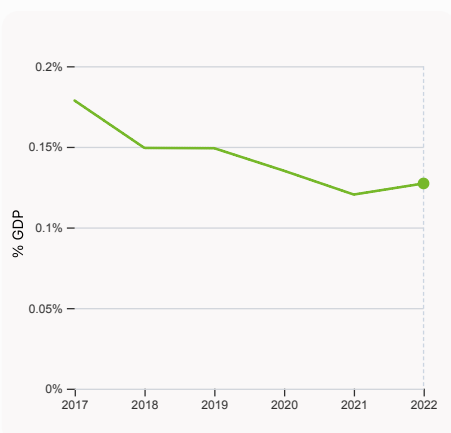
6.1.5 Citable documents H-index

was equal to an index value of 184 in 2022, up by 10.18% from the year prior – and equivalent to an indicator rank of 87.



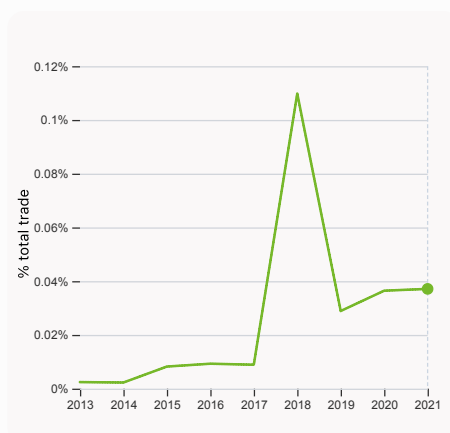
6.2.2 Unicorn valuation, % GDP

was equal to 0 % GDP in 2023 – and equivalent to an indicator rank of 48.



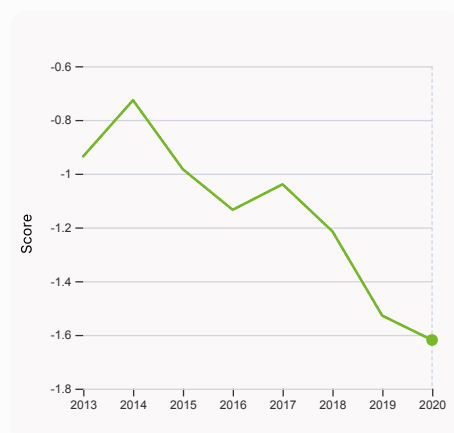
6.2.3 Software spending, % GDP

was equal to 0.127% GDP in 2022, up by 0.0069 percentage points from the year prior – and equivalent to an indicator rank of 85.



6.3.1 Intellectual property receipts, % total trade

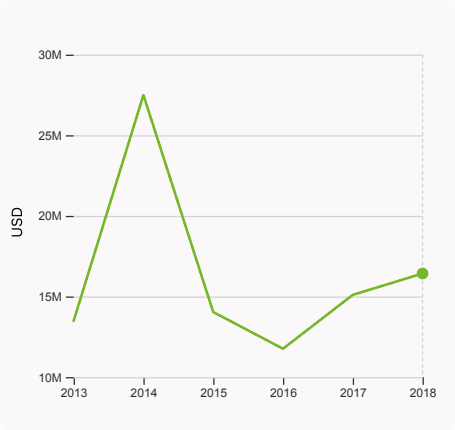
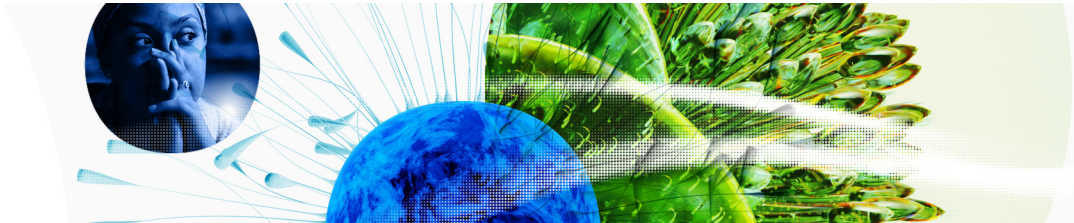
was equal to 0.037% total trade in 2021, up by 0.00067 percentage points from the year prior – and equivalent to an indicator rank of 78.



6.3.2 Production and export complexity

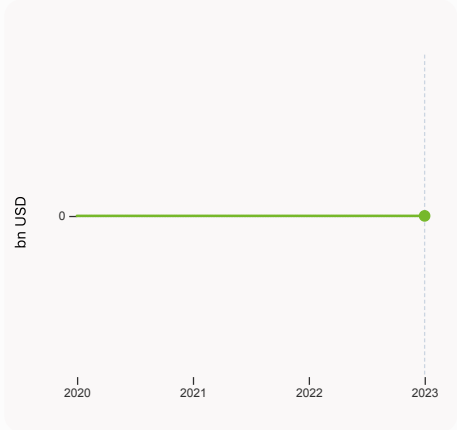
was equal to a score of -1.619 in 2020, down by 5.93% from the year prior – and equivalent to an indicator rank of 117.

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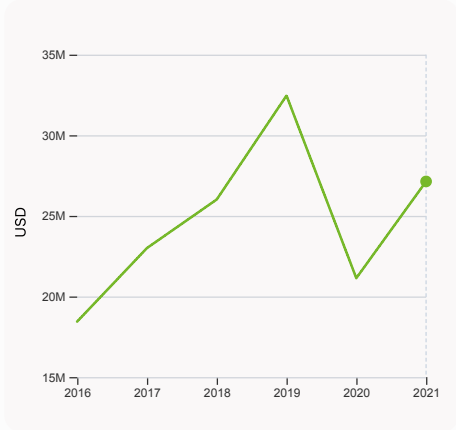
6.3.3 High-tech exports

was equal to 16,426,291 USD in 2018, up by 8.77% from the year prior – and equivalent to an indicator rank of 107.



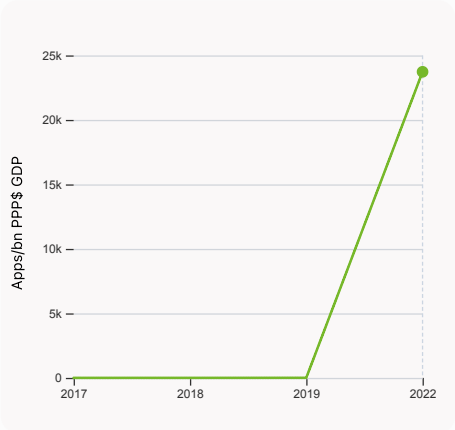
7.1.3 Global brand value, top 5,000

was equal to 0 bn USD in 2023 – and equivalent to an indicator rank of 74.



7.2.1 Cultural and creative services exports

was equal to 27,136,000 USD in 2021, up by 28.36% from the year prior – and equivalent to an indicator rank of 64.



7.3.4 Mobile app creation/bn PPP\$ GDP

was equal to 23,729 Apps/bn PPP\$ GDP in 2022, up by 580071.15% from the year prior – and equivalent to an indicator rank of 95.

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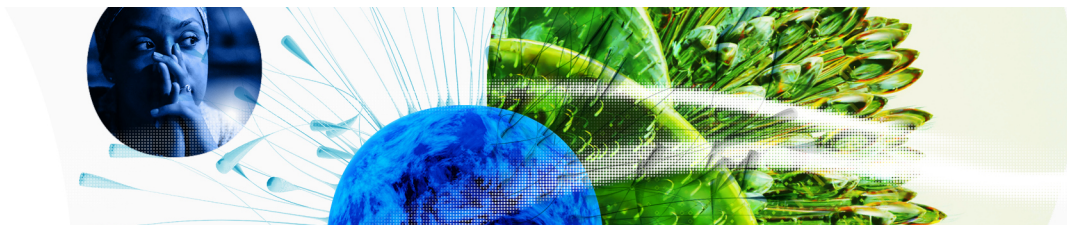


GII 2023 rank

123

Cameroon

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
117	123	Lower middle	SSA	27.9	123.3	4,419.0
Score / Value Rank						
Score / Value Rank						
Institutions						
41.3 91						
1.1 Institutional environment						
21.6 122						
1.1.1 Operational stability for businesses*						
30.6 117						
1.1.2 Government effectiveness*						
12.6 123						
1.2 Regulatory environment						
44.7 111						
1.2.1 Regulatory quality*						
18.2 122						
1.2.2 Rule of law*						
7.6 125 ◇						
1.2.3 Cost of redundancy dismissal						
19.9 86						
1.3 Business environment						
57.5 40						
1.3.1 Policies for doing business*						
47.5 64 ●						
1.3.2 Entrepreneurship policies and culture*						
67.6 16						
Human capital and research						
16.2 112						
2.1 Education						
41.5 95						
2.1.1 Expenditure on education, % GDP						
2.8 110						
2.1.2 Government funding/pupil, secondary, % GDP/cap						
n/a n/a						
2.1.3 School life expectancy, years						
12.1 94						
2.1.4 PISA scales in reading, maths and science						
n/a n/a						
2.1.5 Pupil-teacher ratio, secondary						
17.5 88						
2.2 Tertiary education						
7.0 117 ◇						
2.2.1 Tertiary enrolment, % gross						
14.3 106						
2.2.2 Graduates in science and engineering, %						
n/a n/a						
2.2.3 Tertiary inbound mobility, %						
2.8 70						
2.3 Research and development (R&D)						
0.0 119						
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 US\$						
0.0 40 ○ ◇						
2.3.4 QS university ranking, top 3*						
0.0 71 ○ ◇						
Infrastructure						
15.0 130 ◇						
3.1 Information and communication technologies (ICTs)						
27.2 124 ◇						
3.1.1 ICT access*						
10.6 129 ○ ◇						
3.1.2 ICT use*						
38.9 110						
3.1.3 Government's online service*						
32.8 118						
3.1.4 E-participation*						
26.7 106						
3.2 General infrastructure						
4.2 131 ◇						
3.2.1 Electricity output, GWh/mn pop.						
339.4 115						
3.2.2 Logistics performance*						
0.0 111 ○ ◇						
3.2.3 Gross capital formation, % GDP						
18.6 105						
3.3 Ecological sustainability						
13.4 112						
3.3.1 GDP/unit of energy use						
9.2 80						
3.3.2 Environmental performance*						
19.2 111						
3.3.3 ISO 14001 environment/bn PPP\$ GDP						
0.1 122						
Market sophistication						
9.0 129 ◇						
4.1 Credit						
23.5 84						
4.1.1 Finance for startups and scaleups*						
54.5 39						
4.1.2 Domestic credit to private sector, % GDP						
14.7 120						
4.1.3 Loans from microfinance institutions, % GDP						
1.0 27 ●						
4.2 Investment						
2.1 101						
4.2.1 Market capitalization, % GDP						
n/a n/a						
4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP						
0.0 77						
4.2.3 VC recipients, deals/bn PPP\$ GDP						
0.0 85						
4.2.4 VC received, value, % GDP						
0.0 82						
4.3 Trade, diversification, and market scale						
1.3 132 ◇						
4.3.1 Applied tariff rate, weighted avg., %						
15.5 132 ○ ◇						
4.3.2 Domestic industry diversification						
n/a n/a						
4.3.3 Domestic market scale, bn PPP\$						
123.3 84						
Business sophistication						
23.2 88						
5.1 Knowledge workers						
21.5 93						
5.1.1 Knowledge-intensive employment, %						
10.9 104						
5.1.2 Firms offering formal training, %						
37.6 40 ●						
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, %						
2.0 110						
5.2 Innovation linkages						
19.8 74						
5.2.1 University-industry R&D collaboration*						
46.6 58 ●						
5.2.2 State of cluster development*						
31.2 91						
5.2.3 GERD financed by abroad, % GDP						
n/a n/a						
5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP						
0.0 118						
5.2.5 Patent families/bn PPP\$ GDP						
0.0 95 ○ ◇						
5.3 Knowledge absorption						
28.3 86						
5.3.1 Intellectual property payments, % total trade						
0.0 109						
5.3.2 High-tech imports, % total trade						
6.1 101						
5.3.3 ICT services imports, % total trade						
1.7 50 ●						
5.3.4 FDI net inflows, % GDP						
2.1 69 ●						
5.3.5 Research talent, % in businesses						
n/a n/a						
Knowledge and technology outputs						
12.9 104						
6.1 Knowledge creation						
8.7 90						
6.1.1 Patents by origin/bn PPP\$ GDP						



→ Data availability

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



> Cameroon has missing data for fifteen indicators and outdated data for sixteen indicators.

> Missing data for Cameroon

Code	Indicator name	Economy Year	Model Year	Source
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2019	UNESCO Institute for Statistics
2.1.4	PISA scales in reading, maths and science	n/a	2018	OECD, PISA
2.2.2	Graduates in science and engineering, %	n/a	2020	UNESCO Institute for Statistics; Eurostat; OECD
2.3.1	Researchers, FTE/mn pop.	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
4.2.1	Market capitalization, % GDP	n/a	2020	World Federation of Exchanges; World Bank
4.3.2	Domestic industry diversification	n/a	2020	United Nations Industrial Development Organization
5.1.3	GERD performed by business, % GDP	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	n/a	2020	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.2.3	GERD financed by abroad, % GDP	n/a	2020	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.3.5	Research talent, % in businesses	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
6.2.4	High-tech manufacturing, %	n/a	2020	United Nations Industrial Development Organization
7.1.1	Intangible asset intensity, top 15, %	n/a	2022	Brand Finance
7.2.2	National feature films/mn pop. 15-69	n/a	2021	OMDIA; United Nations, World Population Prospects
7.2.3	Entertainment and media market/th pop. 15-69	n/a	2022	PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund

Global Innovation Index 2023



> Outdated data for Cameroon

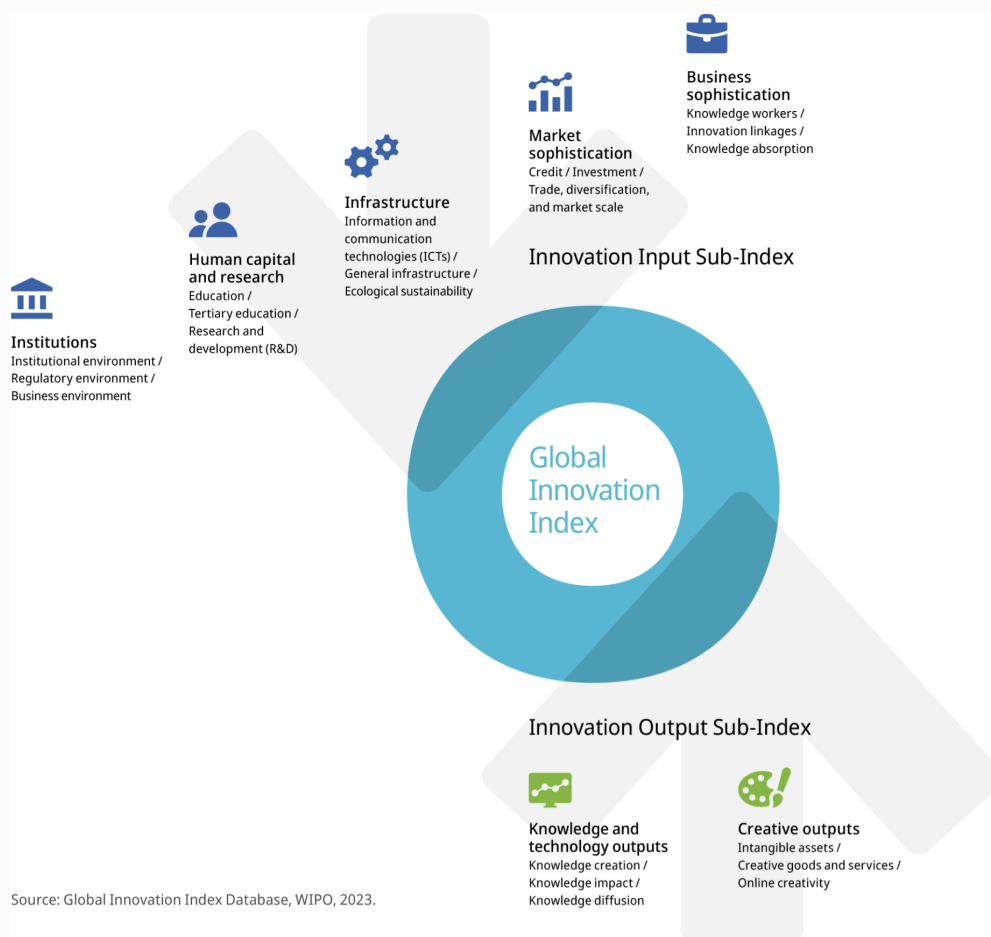
Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture	2016	2022	Global Entrepreneurship Monitor
2.1.3	School life expectancy, years	2016	2020	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2018	2020	UNESCO Institute for Statistics
2.2.3	Tertiary inbound mobility, %	2018	2020	UNESCO Institute for Statistics
3.2.1	Electricity output, GWh/mn pop.	2020	2021	International Energy Agency
4.1.1	Finance for startups and scaleups	2016	2022	Global Entrepreneurship Monitor
4.1.2	Domestic credit to private sector, % GDP	2018	2020	International Monetary Fund; World Bank and OECD GDP estimates.
4.1.3	Loans from microfinance institutions, % GDP	2020	2021	International Monetary Fund, Financial Access Survey (FAS)
4.2.2	Venture capital (VC) investors, deals/bn PPP\$ GDP	2021	2022	Refinitiv; International Monetary Fund
4.3.1	Applied tariff rate, weighted avg., %	2019	2020	World Bank
5.1.1	Knowledge-intensive employment, %	2014	2022	International Labour Organization
5.1.2	Firms offering formal training, %	2016	2019	World Bank Enterprise Surveys
5.1.5	Females employed w/advanced degrees, %	2014	2022	International Labour Organization
5.3.2	High-tech imports, % total trade	2018	2021	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development
6.3.3	High-tech exports, % total trade	2018	2021	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	2018	2021	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development

Global Innovation Index 2023



→ 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.



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.