



CAMEROON

121st Cameroon ranks 121st among the 132 economies featured in the GII 2022.

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.

The following table shows the rankings of Cameroon over the past three years, noting that 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 2022 is between ranks 119 and 125.

Rankings for Cameroon (2020–2022)

GIIYR	GII	Innovation inputs	Innovation outputs
2020	119	120	119
2021	123	124	117
2022	121	124	114

- Cameroon performs better in innovation outputs than innovation inputs in 2022.
- This year Cameroon ranks 124th in innovation inputs, the same as last year but lower than 2020.
- As for innovation outputs, Cameroon ranks 114th. This position is higher than both 2021 and 2020.

33rd Cameroon ranks 33rd among the 36 lower-middle-income group economies.

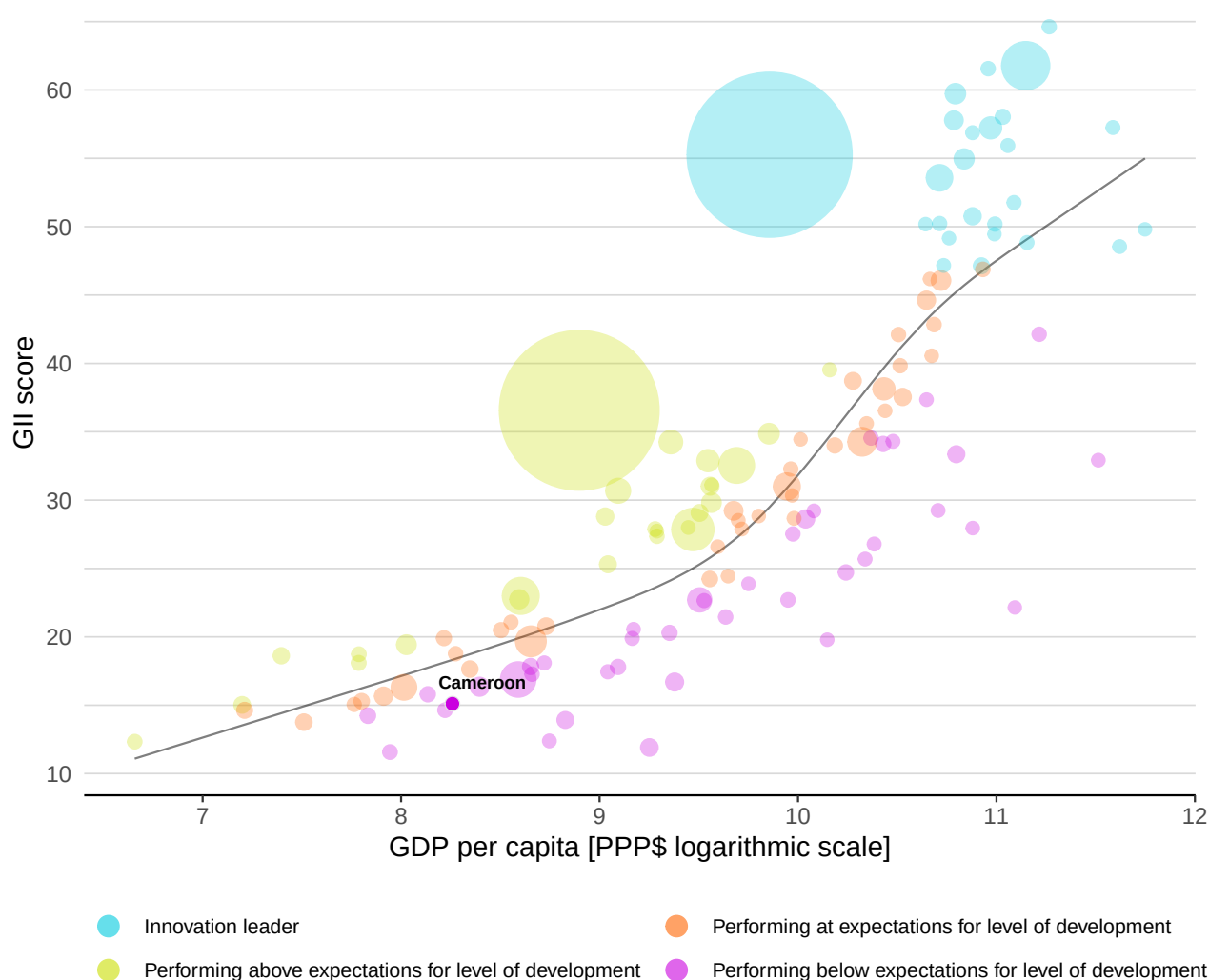
18th Cameroon ranks 18th among the 27 economies in Sub-Saharan Africa.

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.

The positive relationship between innovation and development

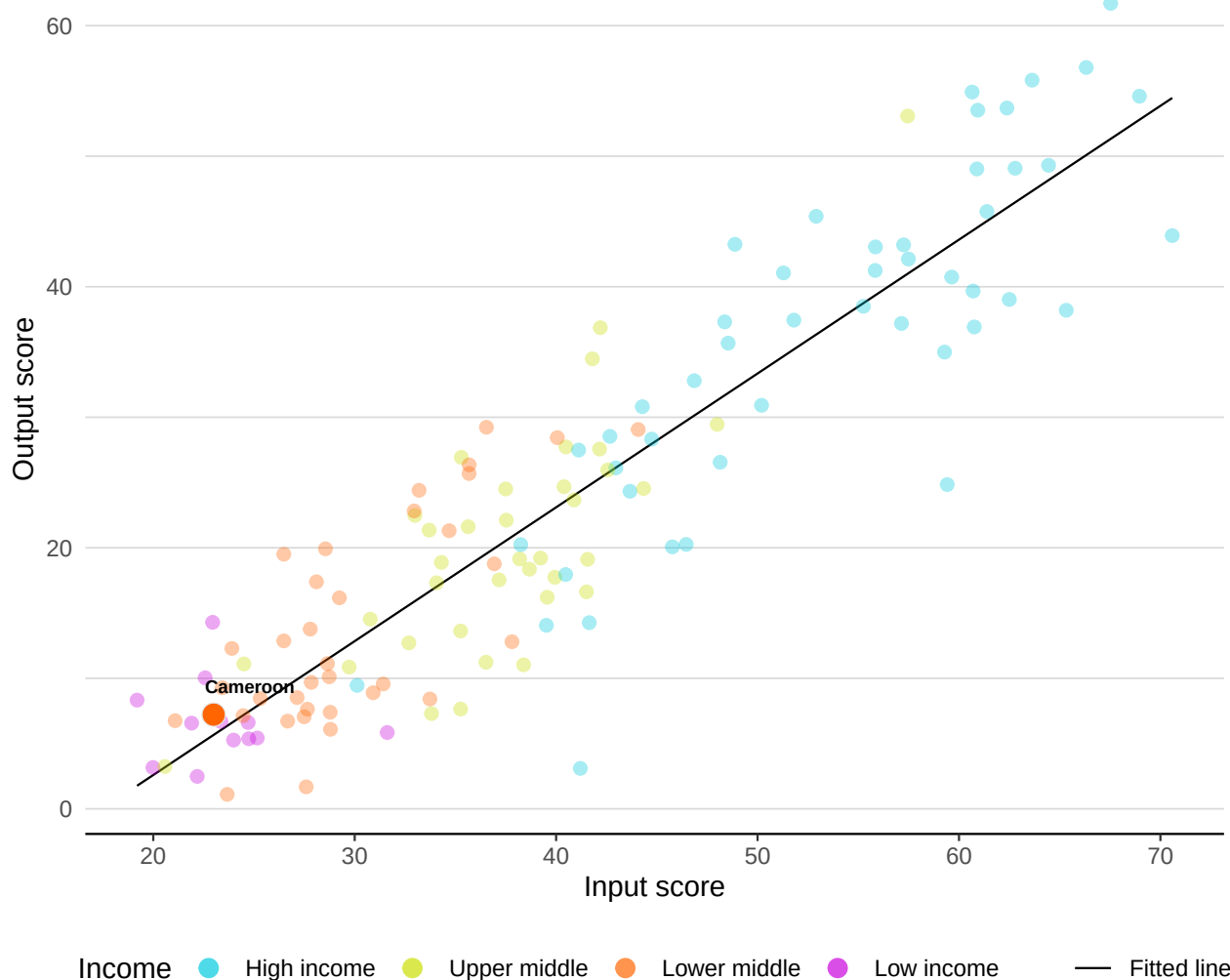


EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

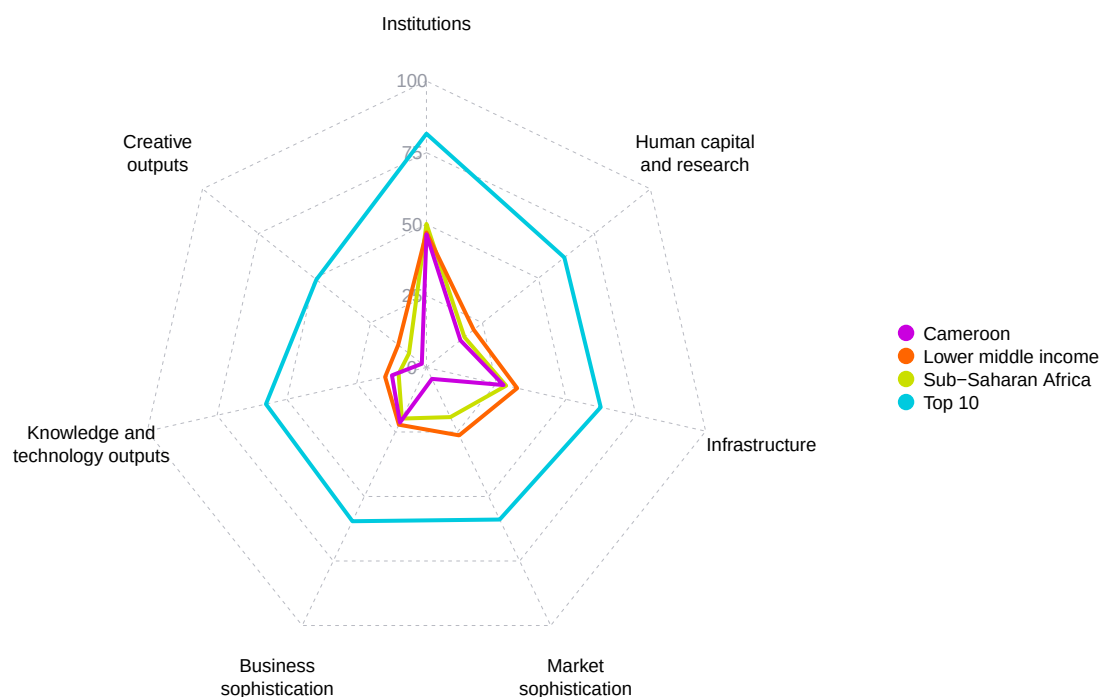
Cameroon produces more innovation outputs relative to its level of innovation investments.

Innovation input to output performance



BENCHMARKING AGAINST OTHER LOWER MIDDLE-INCOME GROUP ECONOMIES AND SUB-SAHARAN AFRICA

The seven GII pillar scores for Cameroon



Lower-middle-income group economies

Cameroon performs below the lower-middle-income group average in all GII pillars.

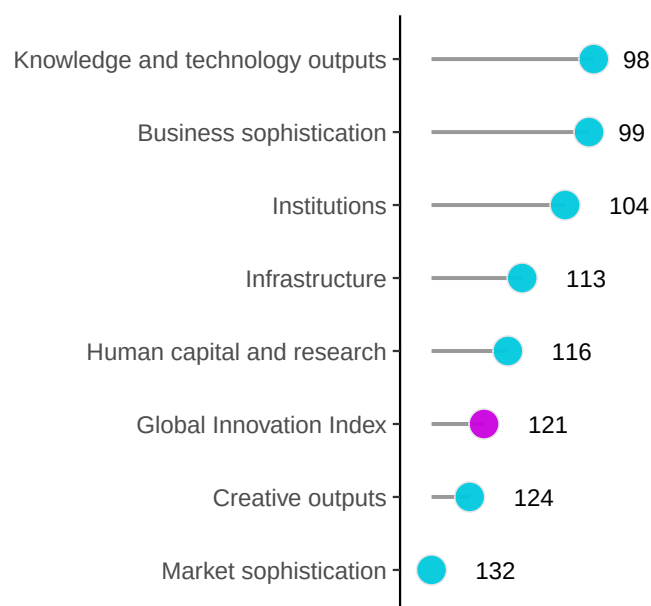
Sub-Saharan Africa

Cameroon performs above the regional average in two pillars, namely: Business sophistication; and, Knowledge and technology outputs.

OVERVIEW OF RANKINGS IN THE SEVEN GII 2022 AREAS

Cameroon performs best in Knowledge and technology outputs and its weakest performance is in Market sophistication.

The seven GII pillar ranks for Cameroon



Note: The highest possible ranking in each pillar is 1.

The full WIPO Intellectual Property Statistics profile for Cameroon can be found at:

https://www.wipo.int/ipstats/en/statistics/country_profile/profile.jsp?code=CM.

INNOVATION STRENGTHS AND WEAKNESSES

The table below gives an overview of the indicator strengths and weaknesses of Cameroon in the GII 2022.

Strengths and weaknesses for Cameroon

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
1.3.1	Policies for doing business	68	1.2.2	Rule of law	124
3.2.3	Gross capital formation, % GDP	28	2.3.3	Global corporate R&D investors, top 3, mn USD	38
4.1.3	Loans from microfinance institutions, % GDP	26	2.3.4	QS university ranking, top 3	72
5.1.2	Firms offering formal training, %	39	3.1.1	ICT access	127
5.3.4	FDI net inflows, % GDP	71	4.3.1	Applied tariff rate, weighted avg., %	131
6.1.4	Scientific and technical articles/bn PPP\$ GDP	57	5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP	119
6.2.1	Labor productivity growth, %	57	6.3.2	Production and export complexity	118
6.3.1	Intellectual property receipts, % total trade	73	7.1.3	Global brand value, top 5,000, % GDP	77
6.3.4	ICT services exports, % total trade	73	7.2.5	Creative goods exports, % total trade	120
7.2.1	Cultural and creative services exports, % total trade	57	7.3.4	Mobile app creation/bn PPP\$ GDP	115

Cameroon

121

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
114	124	Lower middle	SSA	27.2	105.1	3,860
		Score/Value	Rank			
 Institutions		46.5	104	 Business sophistication		
1.1	Political environment	42.6	124 ○	5.1	Knowledge workers	21.2 [92]
1.1.1	Political and operational stability*	54.5	116	5.1.1	Knowledge-intensive employment, %	10.9 105
1.1.2	Government effectiveness*	30.7	119	5.1.2	Firms offering formal training, %	37.6 39 ●
1.2	Regulatory environment	48.5	111	5.1.3	GERD performed by business, % GDP	n/a n/a
1.2.1	Regulatory quality*	24.5	118	5.1.4	GERD financed by business, %	n/a n/a
1.2.2	Rule of law*	16.3	124 ○ ◇	5.1.5	Females employed w/advanced degrees, %	2.0 106
1.2.3	Cost of redundancy dismissal	19.9	85	5.2	Innovation linkages	21.3 79
1.3	Business environment	48.3	[64]	5.2.1	University-industry R&D collaboration†	41.4 76
1.3.1	Policies for doing business†	48.3	68 ●	5.2.2	State of cluster development and depth†	41.4 99
1.3.2	Entrepreneurship policies and culture*	n/a	n/a	5.2.3	GERD financed by abroad, % GDP	n/a n/a
 Human capital and research		15.2	116	5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP	0.0 119 ○
2.1	Education	38.3	102	5.2.5	Patent families/bn PPP\$ GDP	0.0 92
2.1.1	Expenditure on education, % GDP	3.2	104	5.3	Knowledge absorption	21.5 102
2.1.2	Government funding/pupil, secondary, % GDP/cap	17.2	71	5.3.1	Intellectual property payments, % total trade	0.0 110
2.1.3	School life expectancy, years	12.1	90	5.3.2	High-tech imports, % total trade	6.1 107
2.1.4	PISA scales in reading, maths and science	n/a	n/a	5.3.3	ICT services imports, % total trade	1.2 83
2.1.5	Pupil-teacher ratio, secondary	19.3	92	5.3.4	FDI net inflows, % GDP	2.1 71 ●
2.2	Tertiary education	7.2	115	5.3.5	Research talent, % in businesses	n/a n/a
2.2.1	Tertiary enrolment, % gross	14.3	104	 Knowledge and technology outputs		12.4 98
2.2.2	Graduates in science and engineering, %	n/a	n/a	6.1	Knowledge creation	7.2 89
2.2.3	Tertiary inbound mobility, %	2.8	71	6.1.1	Patents by origin/bn PPP\$ GDP	0.4 78
2.3	Research and development (R&D)	0.0	[120]	6.1.2	PCT patents by origin/bn PPP\$ GDP	0.0 81
2.3.1	Researchers, FTE/mn pop.	n/a	n/a	6.1.3	Utility models by origin/bn PPP\$ GDP	0.0 66
2.3.2	Gross expenditure on R&D, % GDP	n/a	n/a	6.1.4	Scientific and technical articles/bn PPP\$ GDP	17.4 57 ●
2.3.3	Global corporate R&D investors, top 3, mn USD	0.0	38 ○ ◇	6.1.5	Citable documents H-index	7.1 86
2.3.4	QS university ranking, top 3*	0.0	72 ○ ◇	6.2	Knowledge impact	23.7 [76]
 Infrastructure		27.6	113	6.2.1	Labor productivity growth, %	1.2 57 ●
3.1	Information and communication technologies (ICTs)	41.8	119	6.2.2	New businesses/th pop. 15–64	n/a n/a
3.1.1	ICT access*	41.0	127 ○ ◇	6.2.3	Software spending, % GDP	0.1 79
3.1.2	ICT use*	37.5	105	6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	0.9 110
3.1.3	Government's online service*	47.1	109	6.2.5	High-tech manufacturing, %	n/a n/a
3.1.4	E-participation*	41.7	111	6.3	Knowledge diffusion	6.1 117
3.2	General infrastructure	22.9	89	6.3.1	Intellectual property receipts, % total trade	0.0 73 ●
3.2.1	Electricity output, GWh/mn pop.	327.7	115	6.3.2	Production and export complexity	5.8 118 ○ ◇
3.2.2	Logistics performance*	25.6	88	6.3.3	High-tech exports, % total trade	0.2 108
3.2.3	Gross capital formation, % GDP	28.8	28 ●	6.3.4	ICT services exports, % total trade	1.7 73 ●
3.3	Ecological sustainability	18.1	105	 Creative outputs		2.1 124 ○ ◇
3.3.1	GDP/unit of energy use	9.1	78	7.1	Intangible assets	1.5 125 ○ ◇
3.3.2	Environmental performance*	30.2	108	7.1.1	Intangible asset intensity, top 15, %	n/a n/a
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	115	7.1.2	Trademarks by origin/bn PPP\$ GDP	6.5 116
 Market sophistication		4.4	132 ○ ◇	7.1.3	Global brand value, top 5,000, % GDP	0.0 77 ○ ◇
4.1	Credit	9.6	111	7.1.4	Industrial designs by origin/bn PPP\$ GDP	0.3 96
4.1.1	Finance for startups and scaleups*	n/a	n/a	7.2	Creative goods and services	4.9 [101]
4.1.2	Domestic credit to private sector, % GDP	14.7	118	7.2.1	Cultural and creative services exports, % total trade	0.4 57 ●
4.1.3	Loans from microfinance institutions, % GDP	1.1	26 ●	7.2.2	National feature films/mn pop. 15–69	n/a n/a
4.2	Investment	2.6	99	7.2.3	Entertainment and media market/th pop. 15–69	n/a n/a
4.2.1	Market capitalization, % GDP	n/a	n/a	7.2.4	Printing and other media, % manufacturing	n/a n/a
4.2.2	Venture capital investors, deals/bn PPP\$ GDP	0.0	61	7.2.5	Creative goods exports, % total trade	0.0 120 ○
4.2.3	Venture capital recipients, deals/bn PPP\$ GDP	0.0	78	7.3	Online creativity	0.4 112
4.2.4	Venture capital received, value, % GDP	0.0	93	7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.2 116
4.3	Trade, diversification, and market scale	1.1	132 ○ ◇	7.3.2	Country-code TLDs/th pop. 15–69	0.9 88
4.3.1	Applied tariff rate, weighted avg., %	15.5	131 ○ ◇	7.3.3	GitHub commit pushes received/mn pop. 15–69	0.6 110
4.3.2	Domestic industry diversification	n/a	n/a	7.3.4	Mobile app creation/bn PPP\$ GDP	0.0 115 ○
4.3.3	Domestic market scale, bn PPP\$	105.1	86			

NOTES: ● indicates a strength; ○ a weakness; ◆ an income group strength; ◇ an income group weakness; * an index; † a survey question. ○ indicates that the economy's data are older than the base year; see appendices for details, including the year of the data, at https://www.wipo.int/global_innovation_index/en/2022. Square brackets [] indicate that the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level.

DATA AVAILABILITY

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

Missing data for Cameroon

Code	Indicator name	Economy year	Model year	Source
1.3.2	Entrepreneurship policies and culture	n/a	2021	Global Entrepreneurship Monitor
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
2.3.1	Researchers, FTE/mn pop.	n/a	2020	UNESCO Institute for Statistics
2.3.2	Gross expenditure on R&D, % GDP	n/a	2020	UNESCO Institute for Statistics
4.1.1	Finance for startups and scaleups	n/a	2021	Global Entrepreneurship Monitor
4.2.1	Market capitalization, % GDP	n/a	2020	World Federation of Exchanges
4.3.2	Domestic industry diversification	n/a	2019	United Nations Industrial Development Organization
5.1.3	GERD performed by business, % GDP	n/a	2020	UNESCO Institute for Statistics
5.1.4	GERD financed by business, %	n/a	2019	UNESCO Institute for Statistics
5.2.3	GERD financed by abroad, % GDP	n/a	2019	UNESCO Institute for Statistics
5.3.5	Research talent, % in businesses	n/a	2020	UNESCO Institute for Statistics
6.2.2	New businesses/th pop. 15–64	n/a	2020	World Bank, Entrepreneurship Database
6.2.5	High-tech manufacturing, %	n/a	2019	United Nations Industrial Development Organization
7.1.1	Intangible asset intensity, top 15, %	n/a	2021	Brand Finance
7.2.2	National feature films/mn pop. 15–69	n/a	2019	OMDIA
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2021	PwC, GEMO
7.2.4	Printing and other media, % manufacturing	n/a	2019	United Nations Industrial Development Organization

Outdated data for Cameroon

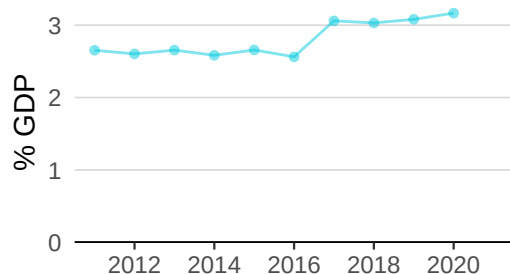
Code	Indicator name	Economy year	Model year	Source
2.1.2	Government funding/pupil, secondary, % GDP/cap	2012	2018	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	2016	2019	UNESCO Institute for Statistics
2.1.5	Pupil-teacher ratio, secondary	2016	2019	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2018	2019	UNESCO Institute for Statistics

Code	Indicator name	Economy year	Model year	Source
2.2.3	Tertiary inbound mobility, %	2018	2019	UNESCO Institute for Statistics
3.2.1	Electricity output, GWh/mn pop.	2019	2020	International Energy Agency
4.1.2	Domestic credit to private sector, % GDP	2018	2020	International Monetary Fund
4.3.1	Applied tariff rate, weighted avg., %	2019	2020	World Bank
5.1.1	Knowledge-intensive employment, %	2014	2021	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	2021	International Labour Organization
5.3.1	Intellectual property payments, % total trade	2019	2020	World Trade Organization and United Nations Conference on Trade and Development
5.3.2	High-tech imports, % total trade	2018	2020	United Nations Comtrade Database
5.3.3	ICT services imports, % total trade	2019	2020	World Trade Organization and United Nations Conference on Trade and Development
6.1.3	Utility models by origin/bn PPP\$ GDP	2019	2020	World Intellectual Property Organization
6.3.1	Intellectual property receipts, % total trade	2019	2020	World Trade Organization and United Nations Conference on Trade and Development
6.3.3	High-tech exports, % total trade	2018	2020	United Nations Comtrade Database
6.3.4	ICT services exports, % total trade	2019	2020	World Trade Organization and United Nations Conference on Trade and Development
7.2.5	Creative goods exports, % total trade	2018	2020	United Nations Comtrade Database
7.3.4	Mobile app creation/bn PPP\$ GDP	2019	2021	data.ia

CAMEROON'S INNOVATION SYSTEM

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

Innovation inputs



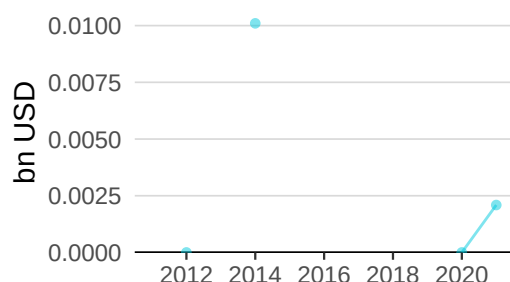
2.1.1 Expenditure on education was equal to 3.2% GDP in 2020—up by 3 percentage points from the year prior—and equivalent to an indicator rank of 104.



2.3.4 QS university ranking was equal to 0.0 in 2021—effectively unchanged from the year prior—and equivalent to an indicator rank of 72.



3.1.1 ICT access was equal to 4.1 in 2020 and equivalent to an indicator rank of 127.



4.2.4 Venture capital received was equal to 0.0 bn USD in 2021—up by Inf percentage points from the year prior—and equivalent to an indicator rank of 93.

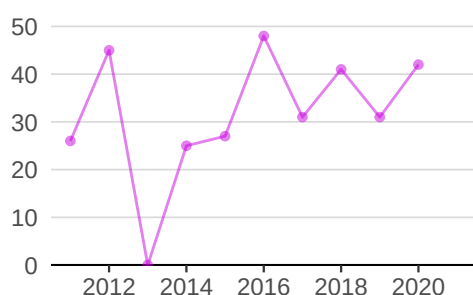
thsd people

750
500
250
0

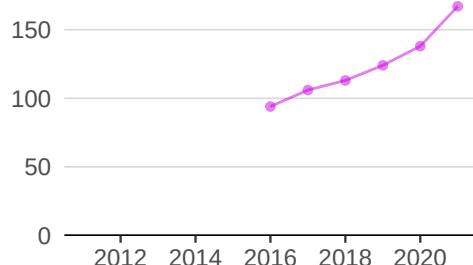
2012 2014 2016 2018 2020

5.1.1 Knowledge-intensive employment was equal to 916.7 thsd people in 2014 and equivalent to an indicator rank of 105.

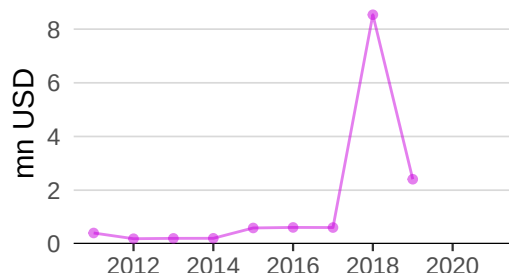
Innovation outputs



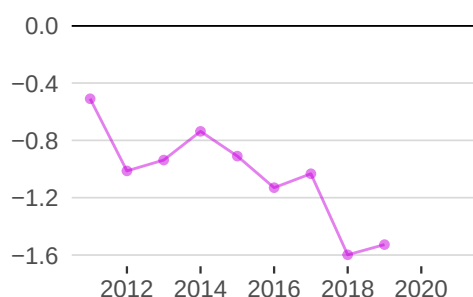
6.1.1 Patents by origin was equal to 42.0 in 2020—up by 35 percentage points from the year prior—and equivalent to an indicator rank of 78.



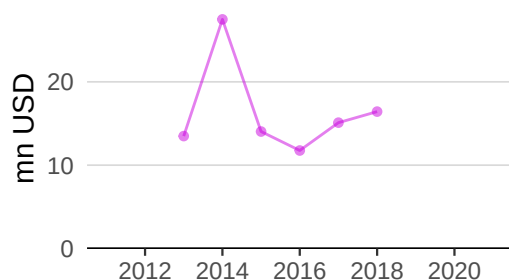
6.1.5 Citable documents H-index was equal to 167.0 in 2021—up by 21 percentage points from the year prior—and equivalent to an indicator rank of 86.



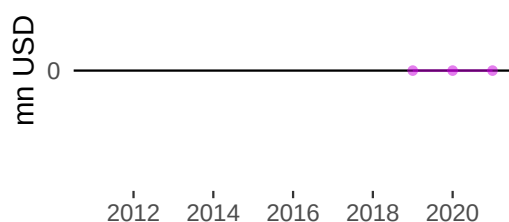
6.3.1 Intellectual property receipts was equal to 2.4 mn USD in 2019—down by 72 percentage points from the year prior—and equivalent to an indicator rank of 73.



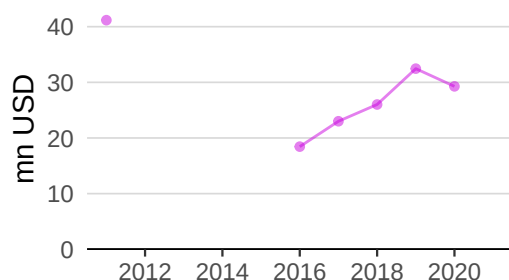
6.3.2 Production and export complexity was equal to -1.5 in 2019—up by 4 percentage points from the year prior—and equivalent to an indicator rank of 118.



6.3.3 High-tech exports was equal to 16.4 mn USD in 2018—up by 9 percentage points from the year prior—and equivalent to an indicator rank of 108.



7.1.3 Global brand value was equal to 0.0 mn USD in 2021—effectively unchanged from the year prior—and equivalent to an indicator rank of 77.



7.2.1 Cultural and creative services exports was equal to 29.3 mn USD in 2020—down by 10 percentage points from the year prior—and equivalent to an indicator rank of 57.



CAMEROON'S INNOVATION TOP PERFORMERS

2.3.3 Global corporate R&D investors

Firm	Industry	R&D	R&D Growth	R&D Intensity	Rank
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No observations

Source: European Commission's Joint Research Centre (<https://iri.jrc.ec.europa.eu/scoreboard/2021-eu-industrial-rd-investment-scoreboard>).

2.3.4 QS university ranking

University	Score	Rank
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No observations

Source: QS Quacquarelli Symonds Ltd (<https://www.topuniversities.com/university-rankings/world-university-rankings/2022>).

7.1.1 Intangible asset intensity, top 15

Firm	Rank
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No observations

Source: Brand Finance (<https://brandirectory.com/reports/gift-2021>).

7.1.3 Global brand value, top 5,000

Brand	Industry	Rank
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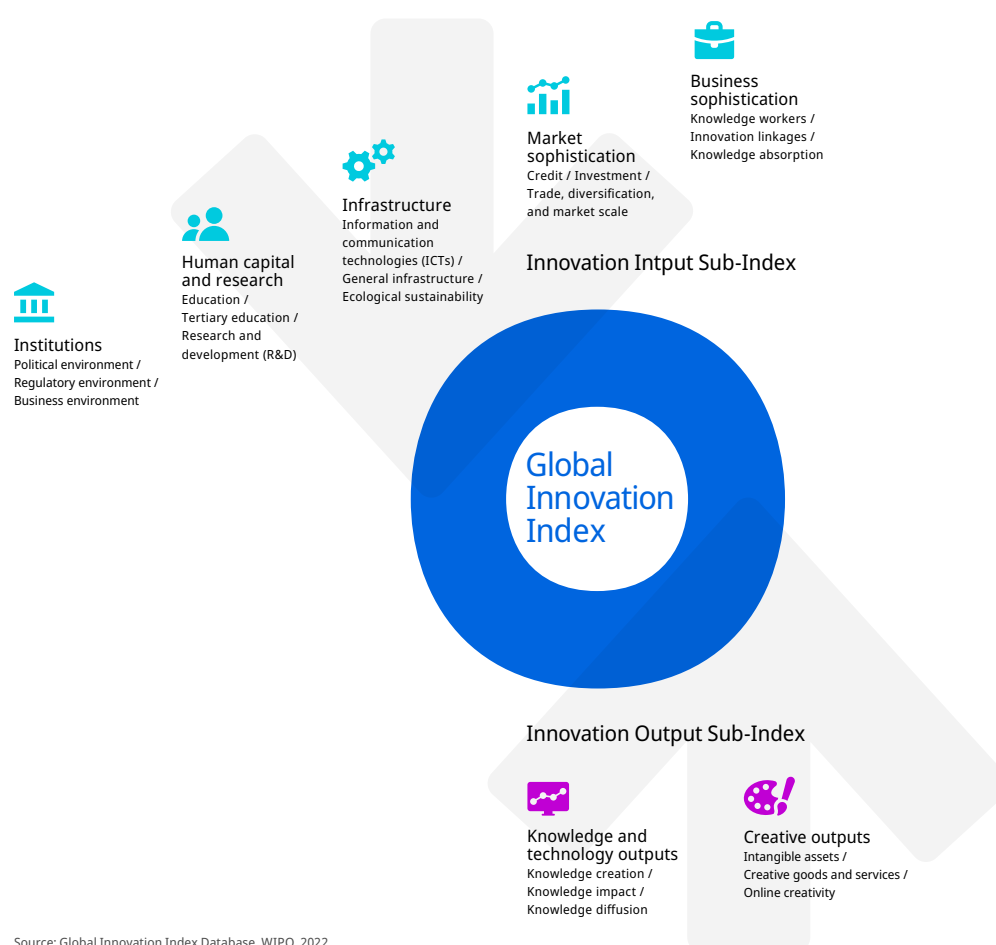
No observations

Source: Brand Finance (<https://brandirectory.com>).

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.