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.

<table>
<thead>
<tr>
<th>Year</th>
<th>GII Position</th>
<th>Innovation Inputs</th>
<th>Innovation Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>119th</td>
<td>120th</td>
<td>119th</td>
</tr>
<tr>
<td>2021</td>
<td>123rd</td>
<td>124th</td>
<td>117th</td>
</tr>
<tr>
<td>2022</td>
<td>121st</td>
<td>124th</td>
<td>114th</td>
</tr>
<tr>
<td>2023</td>
<td>123rd</td>
<td>123rd</td>
<td>117th</td>
</tr>
</tbody>
</table>

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.
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

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

![Graph showing the relationship between innovation inputs and outputs]
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
- 123rd Global Innovation Index

**Lowest rankings**

- 129th Market sophistication
- 130th Infrastructure

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

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.
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**
- **Lower middle income | 23.20**
- **Cameroon | 23.11**
- **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**
## 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).

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rank</strong></td>
<td><strong>Code</strong></td>
</tr>
<tr>
<td>27</td>
<td>4.1.3</td>
</tr>
<tr>
<td>40</td>
<td>5.1.2</td>
</tr>
<tr>
<td>50</td>
<td>5.3.3</td>
</tr>
<tr>
<td>51</td>
<td>6.3.4</td>
</tr>
<tr>
<td>58</td>
<td>5.2.1</td>
</tr>
<tr>
<td>62</td>
<td>6.1.4</td>
</tr>
<tr>
<td>64</td>
<td>1.3.1</td>
</tr>
<tr>
<td>69</td>
<td>5.3.4</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.
> 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.
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.
## Global Innovation Index 2023

**Cameroon**

### Output rank 117 | Input rank 123

<table>
<thead>
<tr>
<th>Region</th>
<th>Population (mn)</th>
<th>GDP, PPP$ (bn)</th>
<th>GDP per capita, PPP$</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSA</td>
<td>27.9</td>
<td>123.3</td>
<td>4,419.0</td>
</tr>
</tbody>
</table>

### Business sophistication 23.2 | 88

#### 5.1 Knowledge workers
5.1.1 Knowledge-intensive employment, %
5.1.2 Firms offering formal training, %
5.1.3 GERD performed by business, % GDP
5.1.4 GERD financed by business, %
5.1.5 Females employed w/advanced degrees, %

#### 5.2 Innovation linkages
5.2.1 University-industry R&D collaboration
5.2.2 State of cluster development
5.2.3 GERD financed by abroad, % GDP
5.2.4 Joint venture/strategic alliance deals/fn PPP$ GDP
5.2.5 Patent families/fn PPP$ GDP

#### 5.3 Knowledge absorption
5.3.1 Intellectual property payments, % total trade
5.3.2 High-tech imports, % total trade
5.3.3 ICT services imports, % total trade
5.3.4 FDI net inflows, % GDP
5.3.5 Research talent, % in businesses

### Business and technology outputs 12.9 | 104

#### 6.1 Knowledge creation
6.1.1 Patents by origin/fn PPP$ GDP
6.1.2 PCT patents by origin/fn PPP$ GDP
6.1.3 Utility models by origin/fn PPP$ GDP
6.1.4 Scientific and technical articles/fn PPP$ GDP
6.1.5 Citable documents h-index

#### 6.2 Knowledge impact
6.2.1 Labor productivity growth, %
6.2.2 Unemployment, %
6.2.3 Software spending, % GDP
6.2.4 High-tech manufacturing, %

#### 6.3 Knowledge diffusion
6.3.1 Intellectual property receipts, % total trade
6.3.2 Production and export complexity
6.3.3 High-tech exports, % total trade
6.3.4 ICT services exports, % total trade
6.3.5 ISO 9001 quality/fn PPP$ GDP

### Creative outputs 6.4 | 118

#### 7.1 Intangible assets
7.1.1 Intangible asset intensity, top 15, %
7.1.2 Trademarks by origin/fn PPP$ GDP
7.1.3 Global brand value, top 5,000
7.1.4 Industrial designs by origin/fn PPP$ GDP

#### 7.2 Creative goods and services
7.2.1 Cultural and creative services exports, % total trade
7.2.2 National feature films/fm pop. 15-69
7.2.3 Entertainment and media market/th pop. 15-69
7.2.4 Creative goods exports, % total trade

### Market sophistication 9.0 | 129

#### 4.1 Credit
4.1.1 Finance for startups and scaleups
4.1.2 Domestic credit to private sector, % GDP
4.1.3 Loans from microfinance institutions, % GDP

#### 4.2 Investment
4.2.1 Market capitalization, % GDP
4.2.2 Venture capital (VC) investors, deals/fn PPP$ GDP
4.2.3 VC recipients, deals/fn PPP$ GDP
4.2.4 VC received, value, % GDP

#### 4.3 Trade, diversification, and market scale
4.3.1 Applied tariff rate, weighted avg., %
4.3.2 Domestic industry diversification
4.3.3 Domestic market scale, bn PPP$
Global Innovation Index 2023

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

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator name</th>
<th>Economy Year</th>
<th>Model Year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3.2</td>
<td>Entrepreneurship policies and culture</td>
<td>2016</td>
<td>2022</td>
<td>Global Entrepreneurship Monitor</td>
</tr>
<tr>
<td>2.1.3</td>
<td>School life expectancy, years</td>
<td>2016</td>
<td>2020</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>2.2.1</td>
<td>Tertiary enrolment, % gross</td>
<td>2018</td>
<td>2020</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>2.2.3</td>
<td>Tertiary inbound mobility, %</td>
<td>2018</td>
<td>2020</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Electricity output, GWh/mn pop.</td>
<td>2020</td>
<td>2021</td>
<td>International Energy Agency</td>
</tr>
<tr>
<td>4.1.1</td>
<td>Finance for startups and scaleups</td>
<td>2016</td>
<td>2022</td>
<td>Global Entrepreneurship Monitor</td>
</tr>
<tr>
<td>4.1.2</td>
<td>Domestic credit to private sector, % GDP</td>
<td>2018</td>
<td>2020</td>
<td>International Monetary Fund; World Bank and OECD GDP estimates.</td>
</tr>
<tr>
<td>4.1.3</td>
<td>Loans from microfinance institutions, % GDP</td>
<td>2020</td>
<td>2021</td>
<td>International Monetary Fund, Financial Access Survey (FAS)</td>
</tr>
<tr>
<td>4.2.2</td>
<td>Venture capital (VC) investors, deals/bn PPP &amp; GDP</td>
<td>2021</td>
<td>2022</td>
<td>Refinitiv; International Monetary Fund</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Applied tariff rate, weighted avg., %</td>
<td>2019</td>
<td>2020</td>
<td>World Bank</td>
</tr>
<tr>
<td>5.1.1</td>
<td>Knowledge-intensive employment, %</td>
<td>2014</td>
<td>2022</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>5.1.2</td>
<td>Firms offering formal training, %</td>
<td>2016</td>
<td>2019</td>
<td>World Bank Enterprise Surveys</td>
</tr>
<tr>
<td>5.1.5</td>
<td>Females employed w/advanced degrees, %</td>
<td>2014</td>
<td>2022</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>5.3.2</td>
<td>High-tech imports, % total trade</td>
<td>2018</td>
<td>2021</td>
<td>United Nations Comtrade Database; World Trade Organization</td>
</tr>
<tr>
<td>5.3.3</td>
<td>High-tech exports, % total trade</td>
<td>2018</td>
<td>2021</td>
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<td>7.2.4</td>
<td>Creative goods exports, % total trade</td>
<td>2018</td>
<td>2021</td>
<td>United Nations Comtrade Database; World Trade Organization; World Bank</td>
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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.