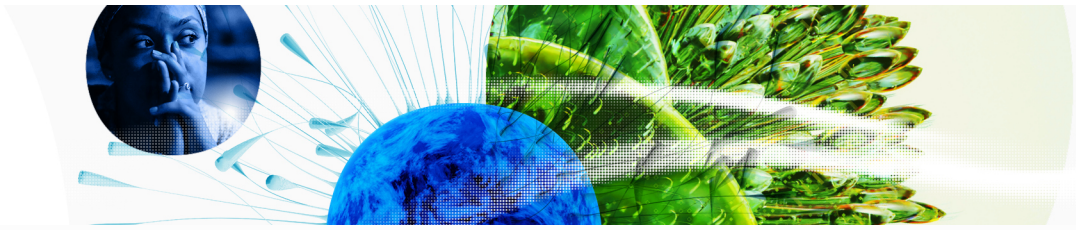
# Global Innovation Index 2023



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**.

## Cabo Verde ranking in the Global Innovation Index 2023

> Cabo Verde ranks 91st among the 132 economies featured in the GII 2023.



> Cabo Verde ranks 14th among the 37 lower-middle-income group economies.



> Cabo Verde ranks 4th among the 28 economies in Sub-Saharan Africa.



### > Cabo Verde GII Ranking (2020-2023)

The table shows the rankings of Cabo Verde 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 Cabo Verde in the GII 2023 is between ranks 87 and 99.

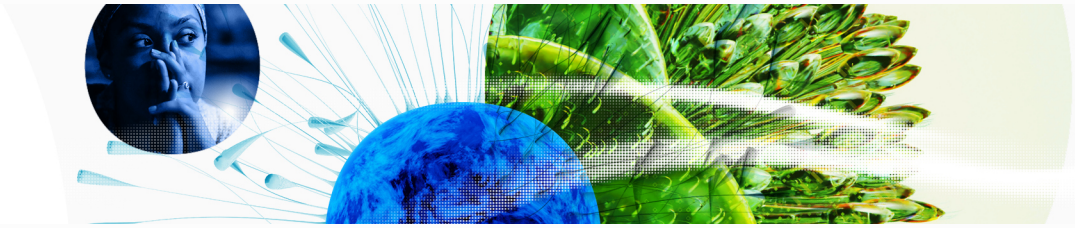
| | GII Position | Innovation Inputs | Innovation Outputs |
|---|---|---|---|
| 2020 | 100th | 99th | 90th |
| 2021 | 89th | 96th | 88th |
| 2022 | n/a | n/a | n/a |
| 2023 | 91st | 74th | 106th |

Cabo Verde performs worse in innovation outputs than innovation inputs in 2023.

This year Cabo Verde ranks 74th in innovation inputs. This position is the same as last year.

Cabo Verde ranks 106th in innovation outputs. This position is the same as last year.

# Global Innovation Index 2023

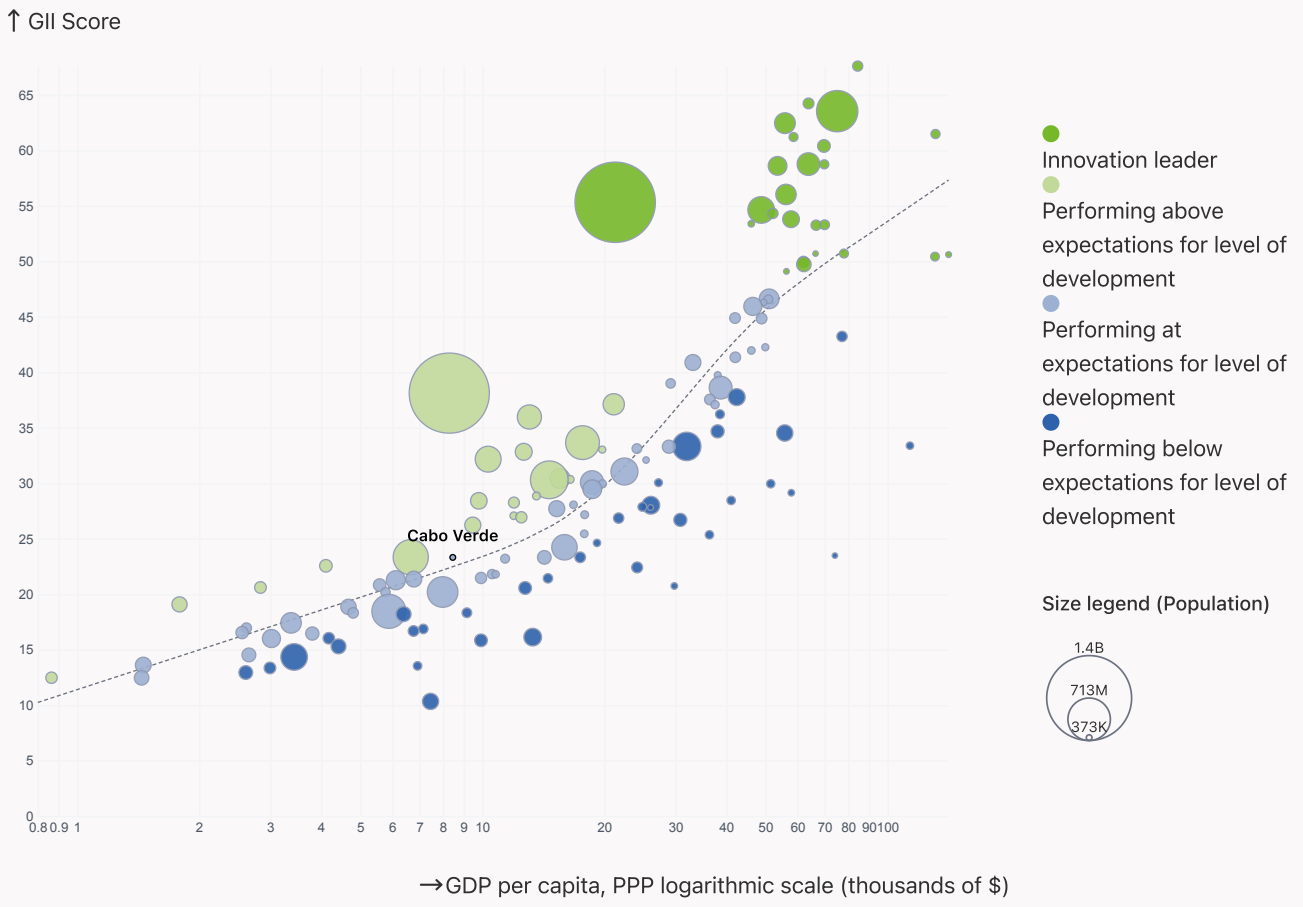


## → Expected vs. observed innovation performance

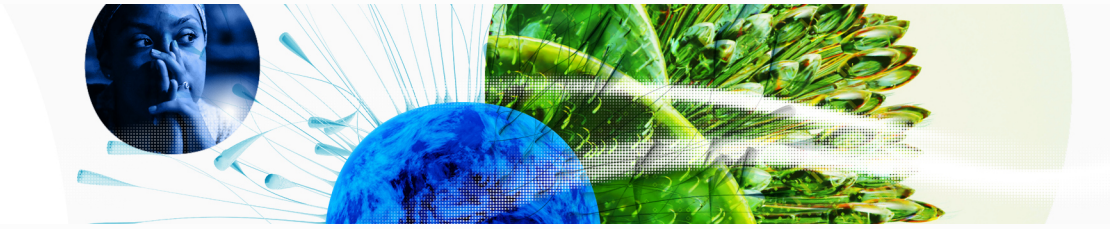
The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected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

> Relative to GDP, Cabo Verde's performance is at expectations for its level of development.

> Innovation overperformers relative to their economic development



# Global Innovation Index 2023

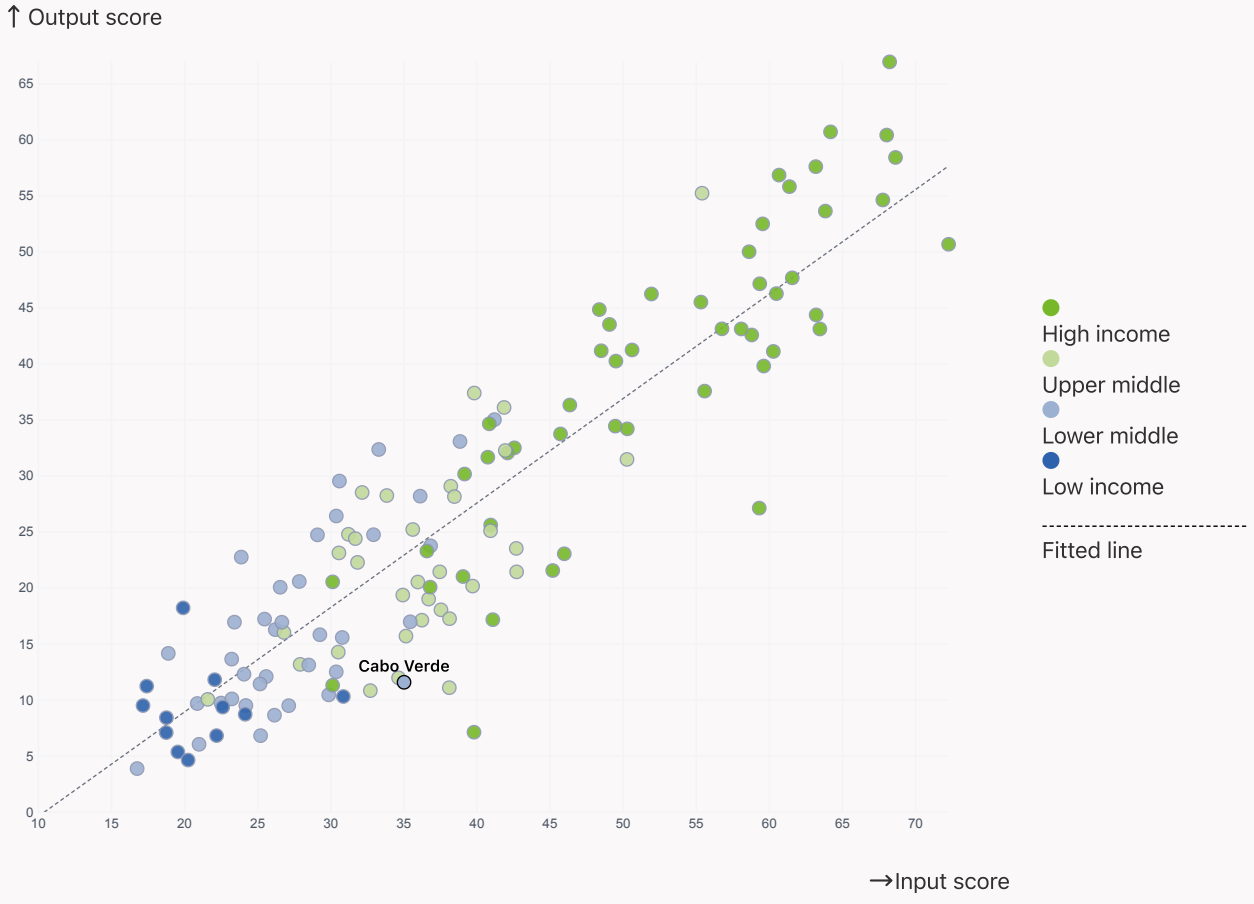


## → Effectively translating innovation investments into innovation outputs

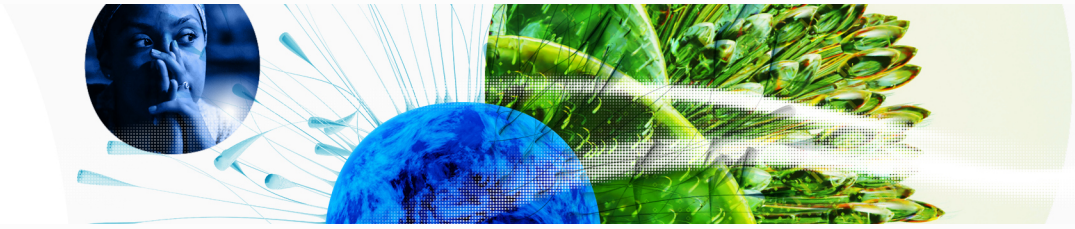
The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.

> Cabo Verde produces less innovation outputs relative to its level of innovation investments.

### > Relationship between innovation inputs and outputs



# Global Innovation Index 2023



## → Overview of Cabo Verde'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 Cabo Verde are those that rank above the GII (shown in blue) and the weakest are those that rank below.


### > Highest rankings

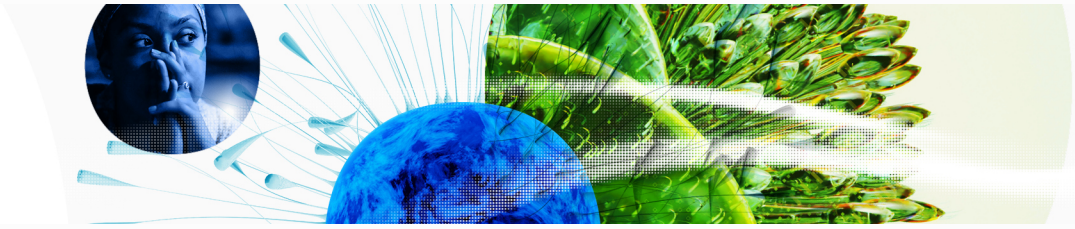
Cabo Verde ranks highest in Institutions (44th), Infrastructure (64th) and Business sophistication (65th).

### > Lowest rankings

Cabo Verde ranks lowest in Creative outputs (108th), Knowledge and technology outputs (98th) and Human capital and research (97th).

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

# Global Innovation Index 2023



## → Benchmark of Cabo Verde against other country groupings for each of the seven areas of the GII Index

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

### > Lower-Middle-Income economies

Cabo Verde performs above the lower-middle-income group average in Business sophistication, Infrastructure, Institutions.

### > Sub-Saharan Africa

Cabo Verde performs above the regional average in Knowledge and technology outputs, Business sophistication, Market sophistication, Human capital and research, Infrastructure, Institutions.

### Knowledge and technology outputs

- Top 10 | Score: 58.96
- Lower middle income | Score: 17.21
- Cabo Verde | Score: 13.85
- Sub-Saharan Africa | Score: 12.16

### Creative outputs

- Top 10 | 56.09
- Lower middle income | 16.35
- Sub-Saharan Africa | 10.36
- Cabo Verde | 9.24

### Business sophistication

- Top 10 | 64.39
- Cabo Verde | 28.38
- Lower middle income | 22.71
- Sub-Saharan Africa | 19.85

### Market sophistication

- Top 10 | 61.93
- Lower middle income | 28.01
- Cabo Verde | 24.74
- Sub-Saharan Africa | 20.00

### Human capital and research

- Top 10 | 60.28
- Lower middle income | 21.73
- Cabo Verde | 21.35
- Sub-Saharan Africa | 17.80

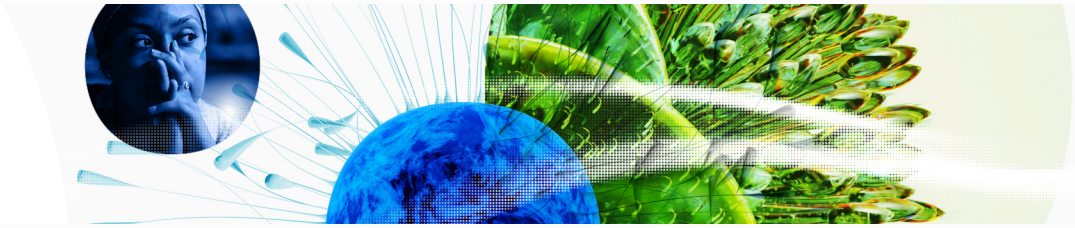
### Infrastructure

- Top 10 | 62.83
- Cabo Verde | 41.14
- Lower middle income | 27.83
- Sub-Saharan Africa | 23.36

### Institutions

- Top 10 | 79.85
- Cabo Verde | 59.67
- Sub-Saharan Africa | 43.27
- Lower middle income | 39.43

# Global Innovation Index 2023



## → Innovation strengths and weaknesses in Cabo Verde

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

> Cabo Verde's main innovation strengths are **Gross capital formation, % GDP** (rank 3), **Expenditure on education, % GDP** (rank 13) and **FDI net inflows, % GDP** (rank 17).

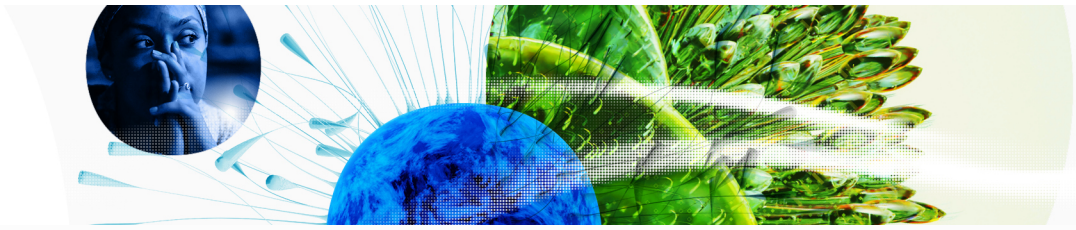
Strengths

| Rank | Code | Indicator name |
|---|---|---|
| 3 | 3.2.3 | Gross capital formation, % GDP |
| 13 | 2.1.1 | Expenditure on education, % GDP |
| 17 | 5.3.4 | FDI net inflows, % GDP |
| 24 | 5.3.3 | ICT services imports, % total trade |
| 30 | 6.2.1 | Labor productivity growth, % |
| 35 | 1.3.1 | Policies for doing business |
| 36 | 6.3.5 | ISO 9001 quality/bn PPP$ GDP |
| 37 | 1.1.1 | Operational stability for businesses |
| 48 | 4.1.2 | Domestic credit to private sector, % GDP |
| 50 | 1.2.2 | Rule of law |

Weaknesses

| Rank | Code | Indicator name |
|---|---|---|
| 132 | 6.1.5 | Citable documents H-index |
| 132 | 4.3.3 | Domestic market scale, bn PPP$ |
| 132 | 6.3.3 | High-tech exports, % total trade |
| 130 | 7.2.4 | Creative goods exports, % total trade |
| 128 | 4.3.1 | Applied tariff rate, weighted avg., % |
| 105 | 4.3.2 | Domestic industry diversification |
| 95 | 5.2.5 | Patent families/bn PPP$ 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$ |

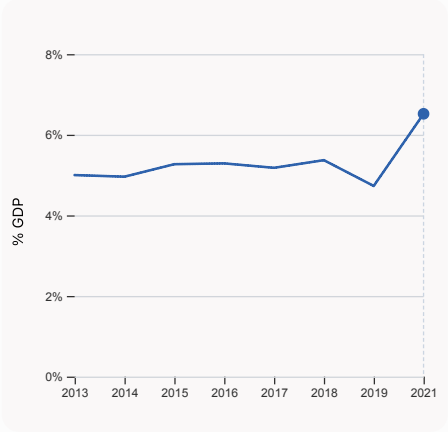
# Global Innovation Index 2023



## → Cabo Verde's innovation system

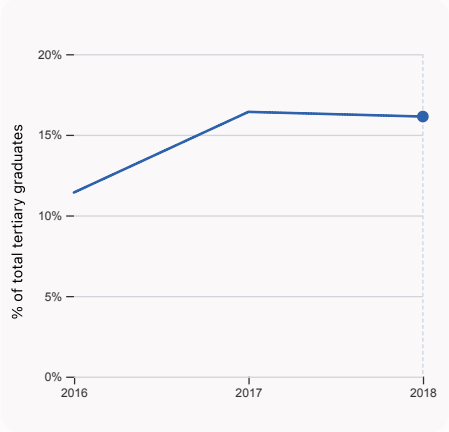
As far as practicable, the plots below present unscaled indicator data.

### > Innovation inputs in Cabo Verde



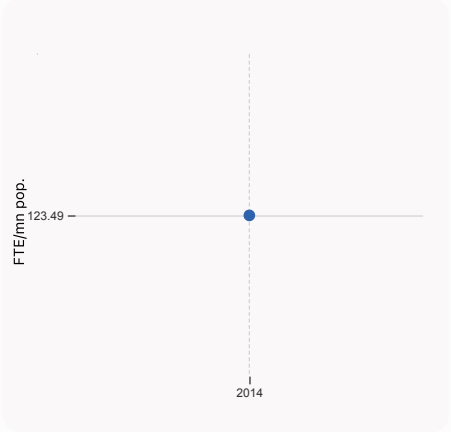

2.1.1 Expenditure on education, % GDP

was equal to 6.52% GDP in 2021, up by 1.79 percentage points from the year prior – and equivalent to an indicator rank of 13.



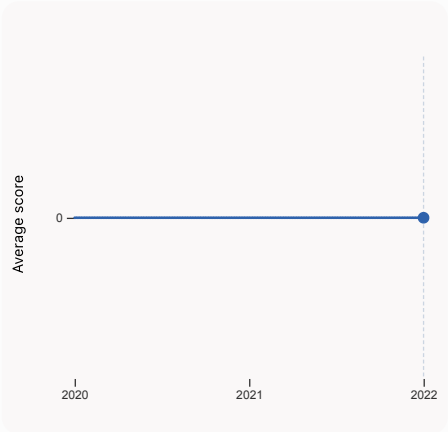

2.2.2 Graduates in science and engineering, %

was equal to 16.13% of total tertiary graduates in 2018, down by 0.29 percentage points from the year prior – and equivalent to an indicator rank of 94.



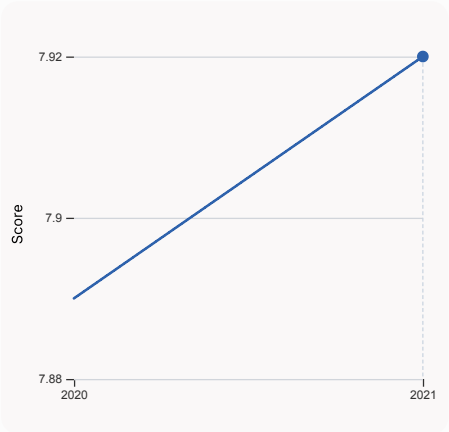

2.3.1 Researchers, FTE/mn pop.

was equal to 123.49 FTE/mn pop. in 2014, equivalent to an indicator rank of 88.



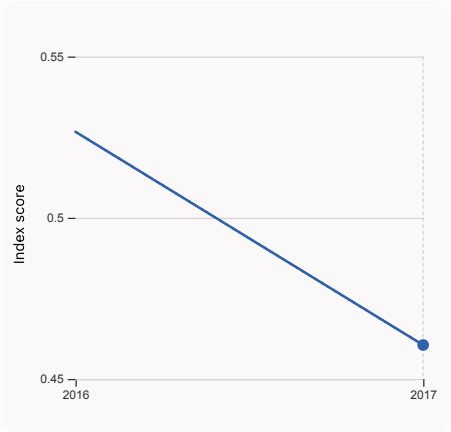

2.3.4 QS university ranking, top 3

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

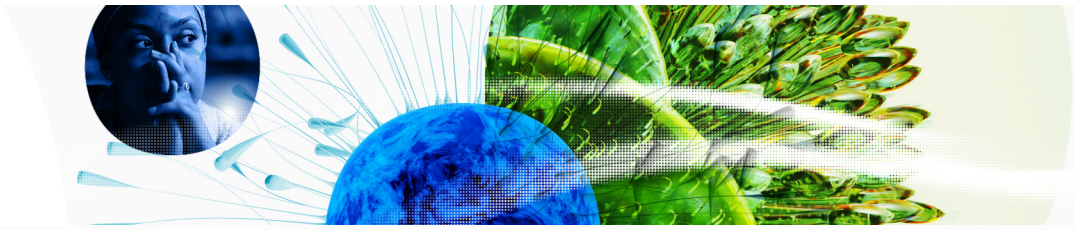
was equal to a score of 7.92 in 2021, up by 0.38% from the year prior – and equivalent to an indicator rank of 91.

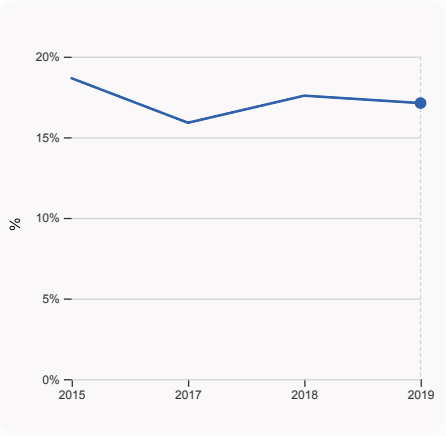



4.3.2 Domestic industry diversification

was equal to an index score of 0.461 in 2017, down by 12.56% from the year prior – and equivalent to an indicator rank of 105.

# Global Innovation Index 2023

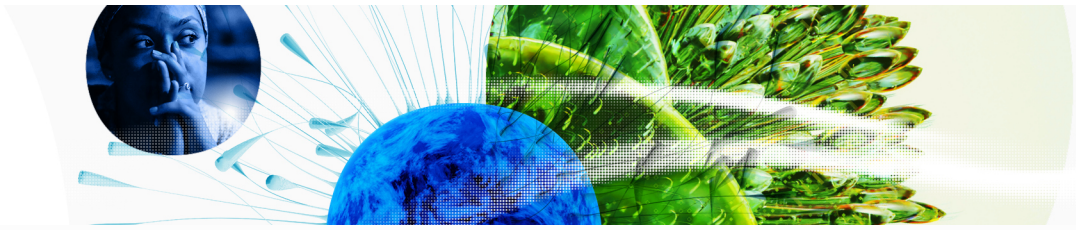





5.1.1 **Knowledge-intensive employment, %**

was equal to 17.12% in 2019, down by 0.46 percentage points from the year prior – and equivalent to an indicator rank of 84.

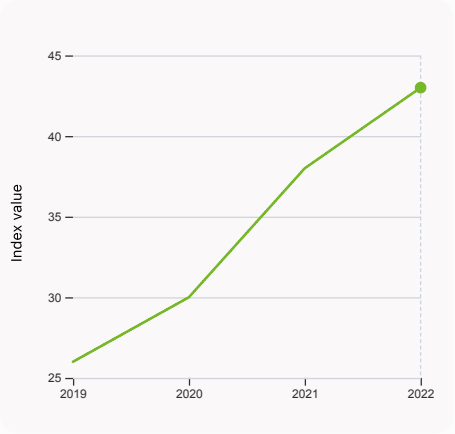
# Global Innovation Index 2023



## > Innovation outputs in Cabo Verde

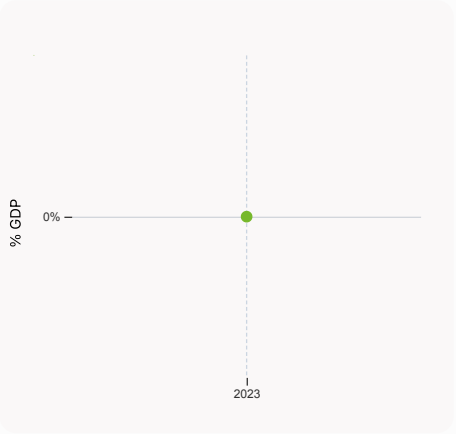

### 6.1.1 Patents by origin

was equal to 0.001 Thousands in 2021, up by with no change from the year prior – and equivalent to an indicator rank of 94.



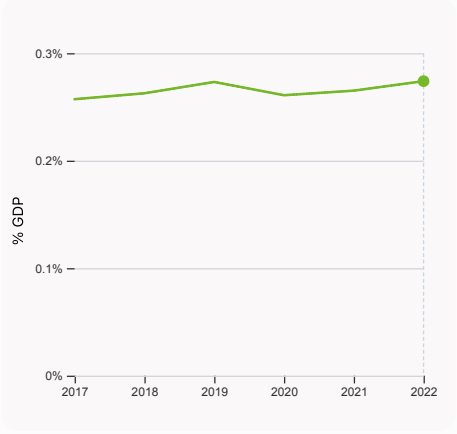

### 6.1.5 Citable documents H-index

was equal to an index value of 43 in 2022, up by 13.16% from the year prior – and equivalent to an indicator rank of 132.



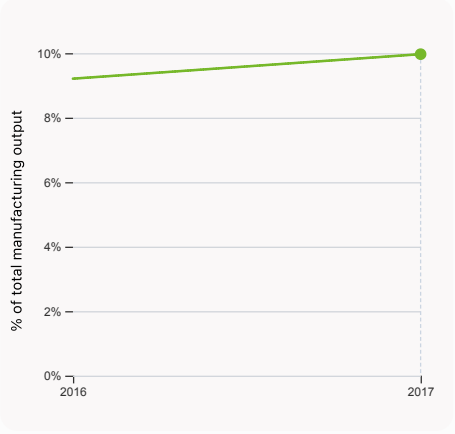

### 6.2.2 Unicorn valuation, % GDP

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



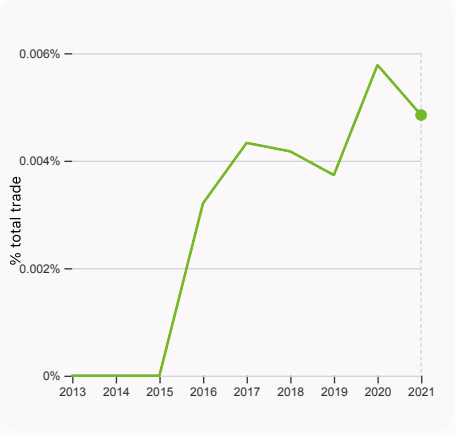

### 6.2.3 Software spending, % GDP

was equal to 0.274% GDP in 2022, up by 0.0088 percentage points from the year prior – and equivalent to an indicator rank of 53.




### 6.2.4 High-tech manufacturing, %

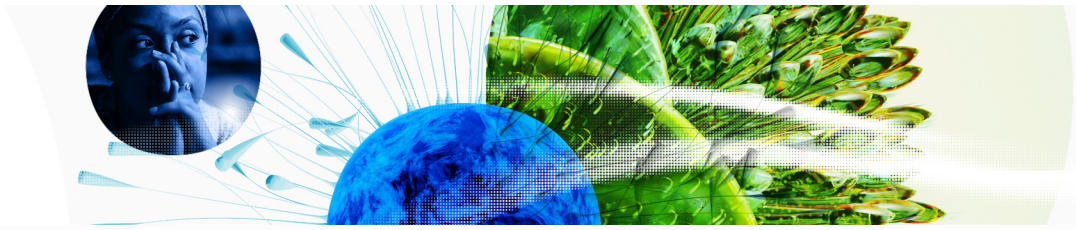
was equal to 9.97% of total manufacturing output in 2017, up by 0.76 percentage points from the year prior – and equivalent to an indicator rank of 92.

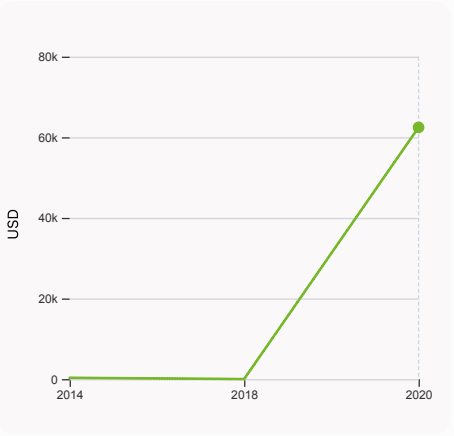



### 6.3.1 Intellectual property receipts, % total trade

was equal to 0.005% total trade in 2021, down by 0.00093 percentage points from the year prior – and equivalent to an indicator rank of 97.

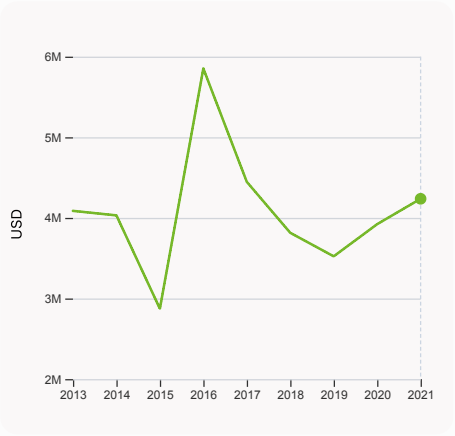
# Global Innovation Index 2023






### 6.3.3 High-tech exports

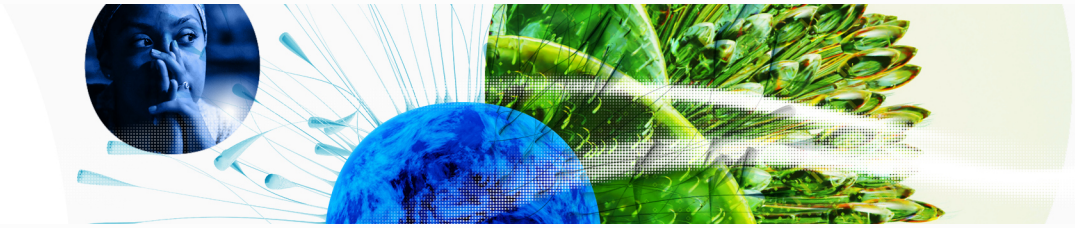
was equal to 62,449 USD in 2020, up by 520308.33% from the year prior – and equivalent to an indicator rank of 132.




### 7.2.1 Cultural and creative services exports

was equal to 4,237,000 USD in 2021, up by 8.032% from the year prior – and equivalent to an indicator rank of 50.

# Global Innovation Index 2023



## Cabo Verde

GII 2023 rank **91**

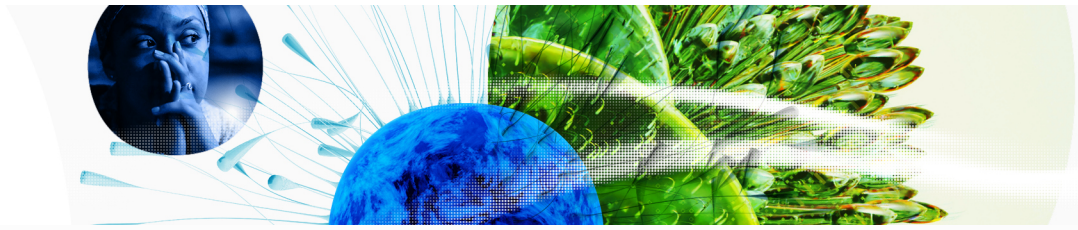
| Output rank | Input rank | Income | Region | Population (mn) | GDP, PPP$ (bn) | GDP per capita, PPP$ |
|---|---|---|---|---|---|---|
| 106 | 74 | Lower middle | SSA | 0.6 | 4.8 | 8,459.8 |

| | Score / Value | Rank | |
|---|---|---|---|
| **Institutions** | **59.7** | **44** | |
| **1.1 Institutional environment** | **51.3** | **52** | |
| 1.1.1 Operational stability for businesses* | 64.6 | 37 | ● |
| 1.1.2 Government effectiveness* | 37.9 | 67 | |
| **1.2 Regulatory environment** | **65.5** | **60** | |
| 1.2.1 Regulatory quality* | 49.2 | 57 | |
| 1.2.2 Rule of law* | 50.0 | 50 | ● |
| 1.2.3 Cost of redundancy dismissal | 17.4 | 75 | |
| **1.3 Business environment** | **62.2** | **30** | |
| 1.3.1 Policies for doing business† | 62.2 | 35 | ● |
| 1.3.2 Entrepreneurship policies and culture† | n/a | n/a | |
| **Human capital and research** | **21.3** | **97** | |
| **2.1 Education** | **51.1** | **66** | |
| 2.1.1 Expenditure on education, % GDP | 6.5 | 13 | ● |
| 2.1.2 Government funding/pupil, secondary, % GDP/cap | 16.1 | 71 | |
| 2.1.3 School life expectancy, years | 12.7 | 88 | |
| 2.1.4 PISA scales in reading, maths and science | n/a | n/a | |
| 2.1.5 Pupil-teacher ratio, secondary | 15.3 | 79 | |
| **2.2 Tertiary education** | **12.5** | **106** | |
| 2.2.1 Tertiary enrolment, % gross | 23.6 | 96 | |
| 2.2.2 Graduates in science and engineering, % | 16.1 | 94 | |
| 2.2.3 Tertiary inbound mobility, % | 1.4 | 83 | |
| **2.3 Research and development (R&D)** | **0.4** | **112** | |
| 2.3.1 Researchers, FTE/mn pop. | 123.5 | 88 | |
| 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** | **41.1** | **64** | |
| **3.1 Information and communication technologies (ICTs)** | **48.6** | **101** | |
| 3.1.1 ICT access* | 68.6 | 91 | |
| 3.1.2 ICT use* | 58.3 | 96 | |
| 3.1.3 Government's online service* | 44.4 | 99 | |
| 3.1.4 E-participation* | 23.3 | 115 | |
| **3.2 General infrastructure** | **53.7** | **11** | |
| 3.2.1 Electricity output, GWh/mn pop. | n/a | n/a | |
| 3.2.2 Logistics performance* | n/a | n/a | |
| 3.2.3 Gross capital formation, % GDP | 44.7 | 3 | ● |
| **3.3 Ecological sustainability** | **21.1** | **78** | |
| 3.3.1 GDP/unit of energy use | n/a | n/a | |
| 3.3.2 Environmental performance* | 39.0 | 67 | |
| 3.3.3 ISO 14001 environment/bn PPP$ GDP | 0.5 | 88 | |
| **Market sophistication** | **24.7** | **96** | |
| **4.1 Credit** | **26.7** | **73** | |
| 4.1.1 Finance for startups and scaleups† | n/a | n/a | |
| 4.1.2 Domestic credit to private sector, % GDP | 73.2 | 48 | ● |
| 4.1.3 Loans from microfinance institutions, % GDP | n/a | n/a | |
| **4.2 Investment** | **n/a** | **n/a** | |
| 4.2.1 Market capitalization, % GDP | n/a | n/a | |
| 4.2.2 Venture capital (VC) investors, deals/bn PPP$ GDP | n/a | n/a | |
| 4.2.3 VC recipients, deals/bn PPP$ GDP | n/a | n/a | |
| 4.2.4 VC received, value, % GDP | n/a | n/a | |
| **4.3 Trade, diversification, and market scale** | **22.7** | **124** | ◇ |
| 4.3.1 Applied tariff rate, weighted avg., % | 12.2 | 128 | ○ ◇ |
| 4.3.2 Domestic industry diversification | 47.0 | 105 | ○ ◇ |
| 4.3.3 Domestic market scale, bn PPP$ | 4.8 | 132 | ○ ◇ |

| | Score / Value | Rank | |
|---|---|---|---|
| **Business sophistication** | **28.4** | **65** | |
| **5.1 Knowledge workers** | **23.8** | **82** | |
| 5.1.1 Knowledge-intensive employment, % | 17.1 | 84 | |
| 5.1.2 Firms offering formal training, % | n/a | n/a | |
| 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, % | 7.6 | 86 | |
| **5.2 Innovation linkages** | **23.1** | **63** | |
| 5.2.1 University-industry R&D collaboration† | 35.5 | 85 | |
| 5.2.2 State of cluster development† | 33.8 | 86 | |
| 5.2.3 GERD financed by abroad, % GDP | n/a | n/a | |
| 5.2.4 Joint venture/strategic alliance deals/bn PPP$ GDP | n/a | n/a | |
| 5.2.5 Patent families/bn PPP$ GDP | 0.0 | 95 | ○ ◇ |
| **5.3 Knowledge absorption** | **38.2** | **50** | |
| 5.3.1 Intellectual property payments, % total trade | 0.5 | 68 | |
| 5.3.2 High-tech imports, % total trade | 6.8 | 91 | |
| 5.3.3 ICT services imports, % total trade | 2.7 | 24 | ● |
| 5.3.4 FDI net inflows, % GDP | 5.2 | 17 | ● |
| 5.3.5 Research talent, % in businesses | n/a | n/a | |
| **Knowledge and technology outputs** | **13.8** | **98** | |
| **6.1 Knowledge creation** | **9.2** | **84** | |
| 6.1.1 Patents by origin/bn PPP$ GDP | 0.2 | 94 | |
| 6.1.2 PCT patents by origin/bn PPP$ GDP | n/a | n/a | |
| 6.1.3 Utility models by origin/bn PPP$ GDP | n/a | n/a | |
| 6.1.4 Scientific and technical articles/bn PPP$ GDP | n/a | n/a | |
| 6.1.5 Citable documents H-index | 0.0 | 132 | ○ ◇ |
| **6.2 Knowledge impact** | **25.2** | **72** | |
| 6.2.1 Labor productivity growth, % | 2.2 | 30 | ● |
| 6.2.2 Unicorn valuation, % GDP | 0.0 | 48 | ○ ◇ |
| 6.2.3 Software spending, % GDP | 0.3 | 53 | |
| 6.2.4 High-tech manufacturing, % | 10.0 | 92 | |
| **6.3 Knowledge diffusion** | **7.1** | **121** | |
| 6.3.1 Intellectual property receipts, % total trade | 0.0 | 97 | |
| 6.3.2 Production and export complexity | n/a | n/a | |
| 6.3.3 High-tech exports, % total trade | 0.0 | 132 | ○ ◇ |
| 6.3.4 ICT services exports, % total trade | 1.2 | 82 | |
| 6.3.5 ISO 9001 quality/bn PPP$ GDP | 7.4 | 36 | ● |
| **Creative outputs** | **9.2** | **108** | |
| **7.1 Intangible assets** | **14.5** | **99** | |
| 7.1.1 Intangible asset intensity, top 15, % | n/a | n/a | |
| 7.1.2 Trademarks by origin/bn PPP$ GDP | 15.0 | 99 | |
| 7.1.3 Global brand value, top 5,000 | n/a | n/a | |
| 7.1.4 Industrial designs by origin/bn PPP$ GDP | 1.0 | 67 | |
| **7.2 Creative goods and services** | **5.7** | **84** | |
| 7.2.1 Cultural and creative services exports, % total trade | 0.6 | 50 | |
| 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 | 0.0 | 130 | ○ |
| **7.3 Online creativity** | **2.3** | **124** | ◇ |
| 7.3.1 Generic top-level domains (TLDs)/th pop. 15-69 | 2.1 | 81 | |
| 7.3.2 Country-code TLDs/th pop. 15-69 | 2.3 | 69 | |
| 7.3.3 GitHub commits/mn pop. 15-69 | 2.4 | 97 | |
| 7.3.4 Mobile app creation/bn PPP$ GDP | n/a | n/a | |

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/gii-ranking. Square brackets [ ] indicate that the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level.

# Global Innovation Index 2023



## → Data availability

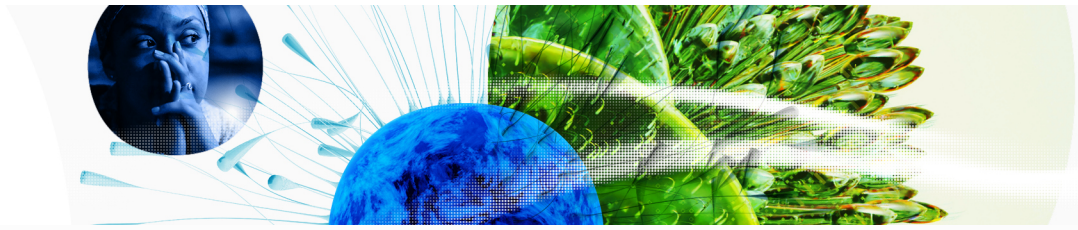
The following tables list indicators that are either missing or outdated for Cabo Verde.

> Cabo Verde has missing data for twenty six indicators and outdated data for fourteen indicators.

## > Missing data for Cabo Verde

| Code | Indicator name | Economy Year | Model Year | Source |
|---|---|---|---|---|
| 1.3.2 | Entrepreneurship policies and culture | n/a | 2022 | Global Entrepreneurship Monitor |
| 2.1.4 | PISA scales in reading, maths and science | n/a | 2018 | OECD, PISA |
| 2.3.2 | Gross expenditure on R&D, % GDP | n/a | 2021 | UNESCO Institute for Statistics; Eurostat; OECD; RICYT |
| 3.2.1 | Electricity output, GWh/mn pop. | n/a | 2021 | International Energy Agency |
| 3.2.2 | Logistics performance | n/a | 2023 | World Bank, Logistics Performance Index 2023 (https://lpi.worldbank.org/); and World Bank 2023, Connecting to Compete 2023: Trade Logistics in the Global Economy ÔÇô The Logistics Performance Index and its Indicators. |
| 3.3.1 | GDP/unit of energy use | n/a | 2020 | International Energy Agency |
| 4.1.1 | Finance for startups and scaleups | n/a | 2022 | Global Entrepreneurship Monitor |
| 4.1.3 | Loans from microfinance institutions, % GDP | n/a | 2021 | International Monetary Fund, Financial Access Survey (FAS) |
| 4.2.1 | Market capitalization, % GDP | n/a | 2020 | World Federation of Exchanges; World Bank |
| 4.2.2 | Venture capital (VC) investors, deals/bn PPP$ GDP | n/a | 2022 | Refinitiv; International Monetary Fund |
| 4.2.3 | VC recipients, deals/bn PPP$ GDP | n/a | 2022 | Refinitiv; International Monetary Fund |
| 4.2.4 | VC received, value, % GDP | n/a | 2022 | Refinitiv; International Monetary Fund |
| 5.1.2 | Firms offering formal training, % | n/a | 2019 | World Bank Enterprise Surveys |
| 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 |

# Global Innovation Index 2023

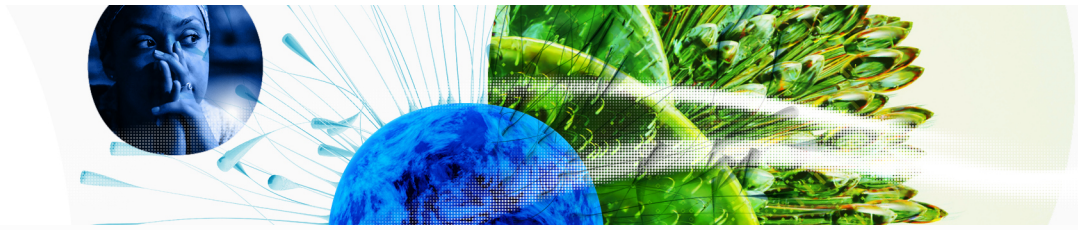


| Code | Indicator name | Economy Year | Model Year | Source |
|---|---|---|---|---|
| 5.2.4 | Joint venture/strategic alliance deals/bn PPP$ GDP | n/a | 2022 | Refinitiv; International Monetary Fund |
| 5.3.5 | Research talent, % in businesses | n/a | 2021 | UNESCO Institute for Statistics; Eurostat; OECD; RICYT |
| 6.1.2 | PCT patents by origin/bn PPP$ GDP | n/a | 2022 | World Intellectual Property Organization; International Monetary Fund |
| 6.1.3 | Utility models by origin/bn PPP$ GDP | n/a | 2021 | World Intellectual Property Organization; International Monetary Fund |
| 6.3.2 | Production and export complexity | n/a | 2020 | Harvard University, Growth Lab |
| 7.1.1 | Intangible asset intensity, top 15, % | n/a | 2022 | Brand Finance |
| 7.1.3 | Global brand value, top 5,000 | n/a | 2023 | Brand Finance; International Monetary Fund |
| 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 |
| 7.3.4 | Mobile app creation/bn PPP$ GDP | n/a | 2022 | data.ia; International Monetary Fund |

## > Outdated data for Cabo Verde

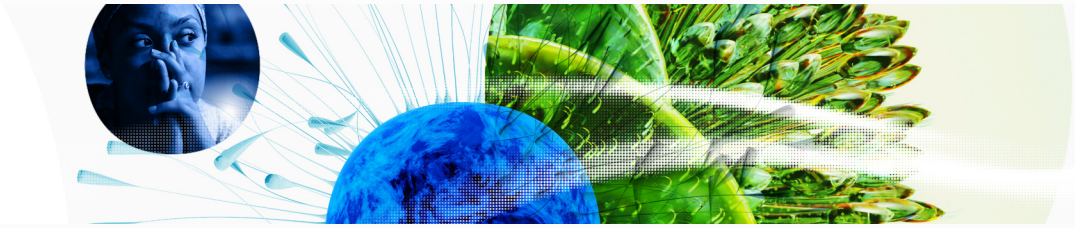
| Code | Indicator name | Economy Year | Model Year | Source |
|---|---|---|---|---|
| 2.1.3 | School life expectancy, years | 2018 | 2020 | UNESCO Institute for Statistics |
| 2.1.5 | Pupil-teacher ratio, secondary | 2019 | 2020 | UNESCO Institute for Statistics |
| 2.2.1 | Tertiary enrolment, % gross | 2018 | 2020 | UNESCO Institute for Statistics |
| 2.2.2 | Graduates in science and engineering, % | 2018 | 2020 | UNESCO Institute for Statistics; Eurostat; OECD |
| 2.2.3 | Tertiary inbound mobility, % | 2018 | 2020 | UNESCO Institute for Statistics |
| 2.3.1 | Researchers, FTE/mn pop. | 2014 | 2021 | UNESCO Institute for Statistics; Eurostat; OECD; RICYT |
| 4.3.2 | Domestic industry diversification | 2017 | 2020 | United Nations Industrial Development Organization |
| 5.1.1 | Knowledge-intensive employment, % | 2019 | 2022 | International Labour Organization |
| 5.1.5 | Females employed w/advanced degrees, % | 2019 | 2022 | International Labour Organization |
| 5.3.2 | High-tech imports, % total trade | 2020 | 2021 | United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development |
| 6.2.4 | High-tech manufacturing, % | 2017 | 2020 | United Nations Industrial Development Organization |

# Global Innovation Index 2023



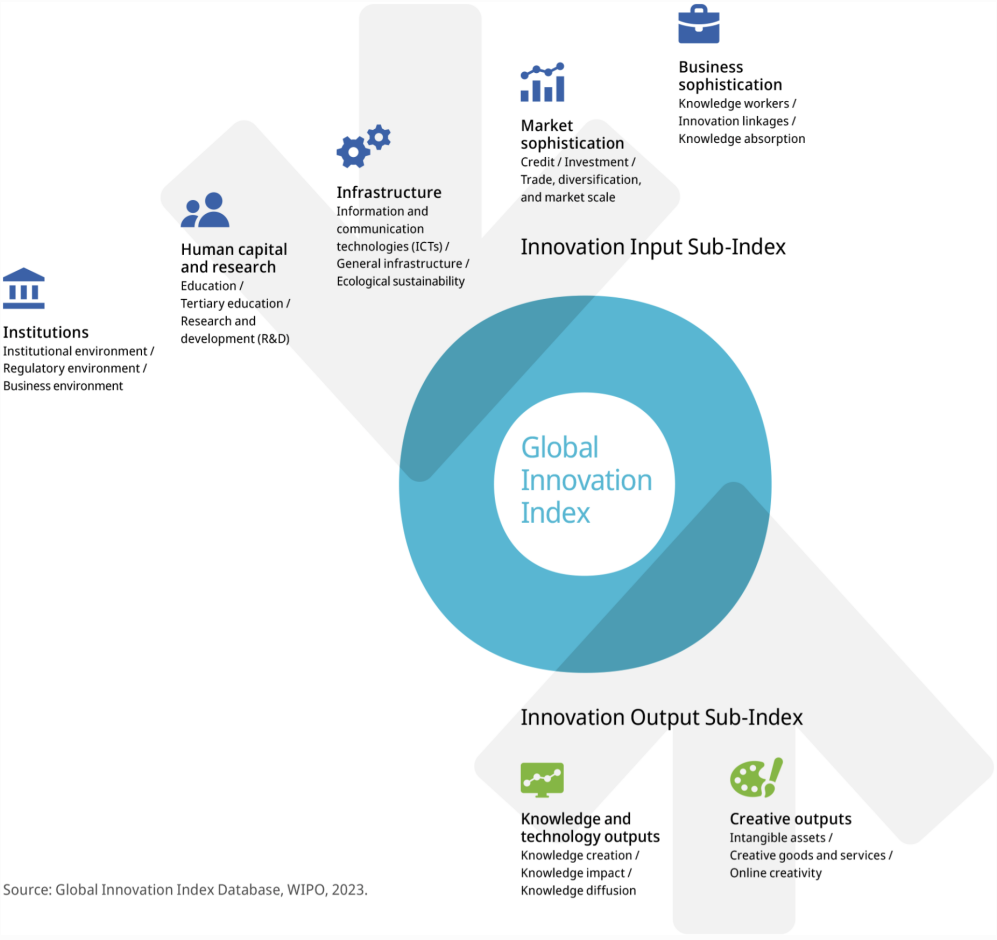
| Code | Indicator name | Economy Year | Model Year | Source |
|---|---|---|---|---|
| 6.3.3 | High-tech exports, % total trade | 2020 | 2021 | United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development; Trade Data Monitor. |
| 7.1.4 | Industrial designs by origin/bn PPP$ GDP | 2020 | 2021 | World Intellectual Property Organization; International Monetary Fund |
| 7.2.4 | Creative goods exports, % total trade | 2020 | 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.




Source: Global Innovation Index Database, WIPO, 2023.

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.