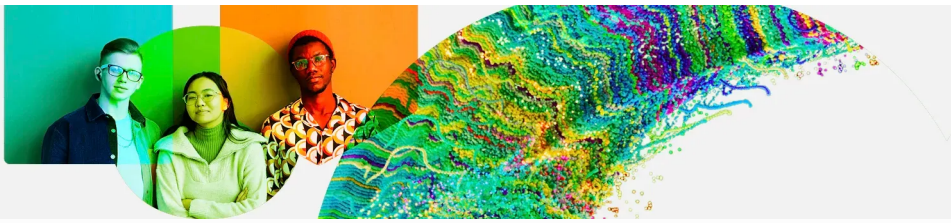
Global Innovation Index 2024



Cabo Verde ranking in the Global Innovation Index 2024

Cabo Verde ranks 90th 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.

Cabo Verde ranks 13th among the 38 lower-middle-income group economies.

Cabo Verde ranks 4th among the 27 economies in Sub-Saharan Africa.

Cabo Verde GII Ranking (2020-2024)

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 2024 is between ranks 88 and 104.

Year	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
2024	90th	68th	113rd

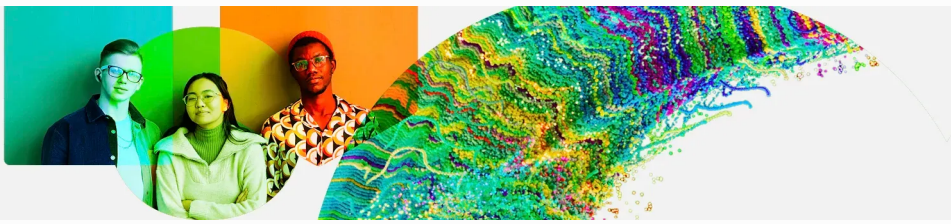
Cabo Verde performs worse in innovation outputs than innovation inputs in 2024.

This year Cabo Verde ranks 68th in innovation inputs. This position is higher than last year.

Cabo Verde ranks 113rd in innovation outputs. This position is lower than last year.

Cabo Verde 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 Cabo Verde, how rapidly is technology being embraced and what are the resulting societal impacts.

For Cabo Verde, 3 indicators have improved in the short-term and 1 indicator has worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture capital		International patent filings
		Deal numbers	Deal values	
▲ 4.9% 2022 - 2023	n/a	n/a	n/a	n/a
▲ 12.9% 2013 - 2023	n/a	n/a	n/a	n/a

Technology adoption

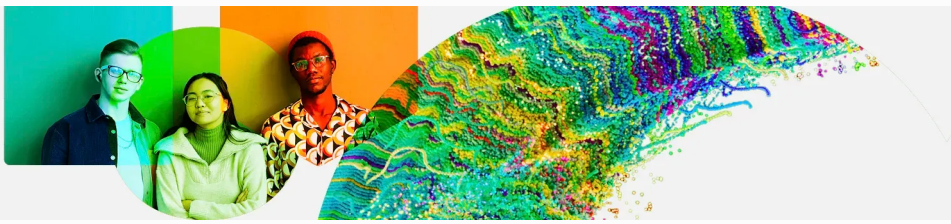
Safe sanitation	Connectivity		Robots	Electric vehicles
	Fixed broadband	5G		
n/a	▲ 10.8% 2021 - 2022	n/a	n/a	n/a
n/a	▲ 4.5% 2012 - 2022		n/a	n/a
n/a	5.8 per 100 inhabitants in 2022	n/a		n/a

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
n/a	▲ 0.9% 2021 - 2022	▲ 2.2°C 2023
n/a	0% 2012 - 2022	n/a
	74.7 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

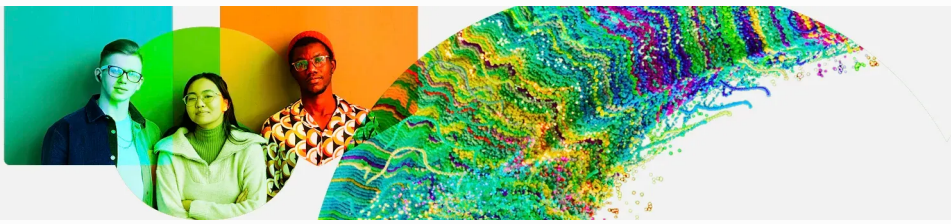


Expected vs. observed innovation performance

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, Cabo Verde's performance is at expectations for its level of development.

> Innovation overperformers relative to their economic development

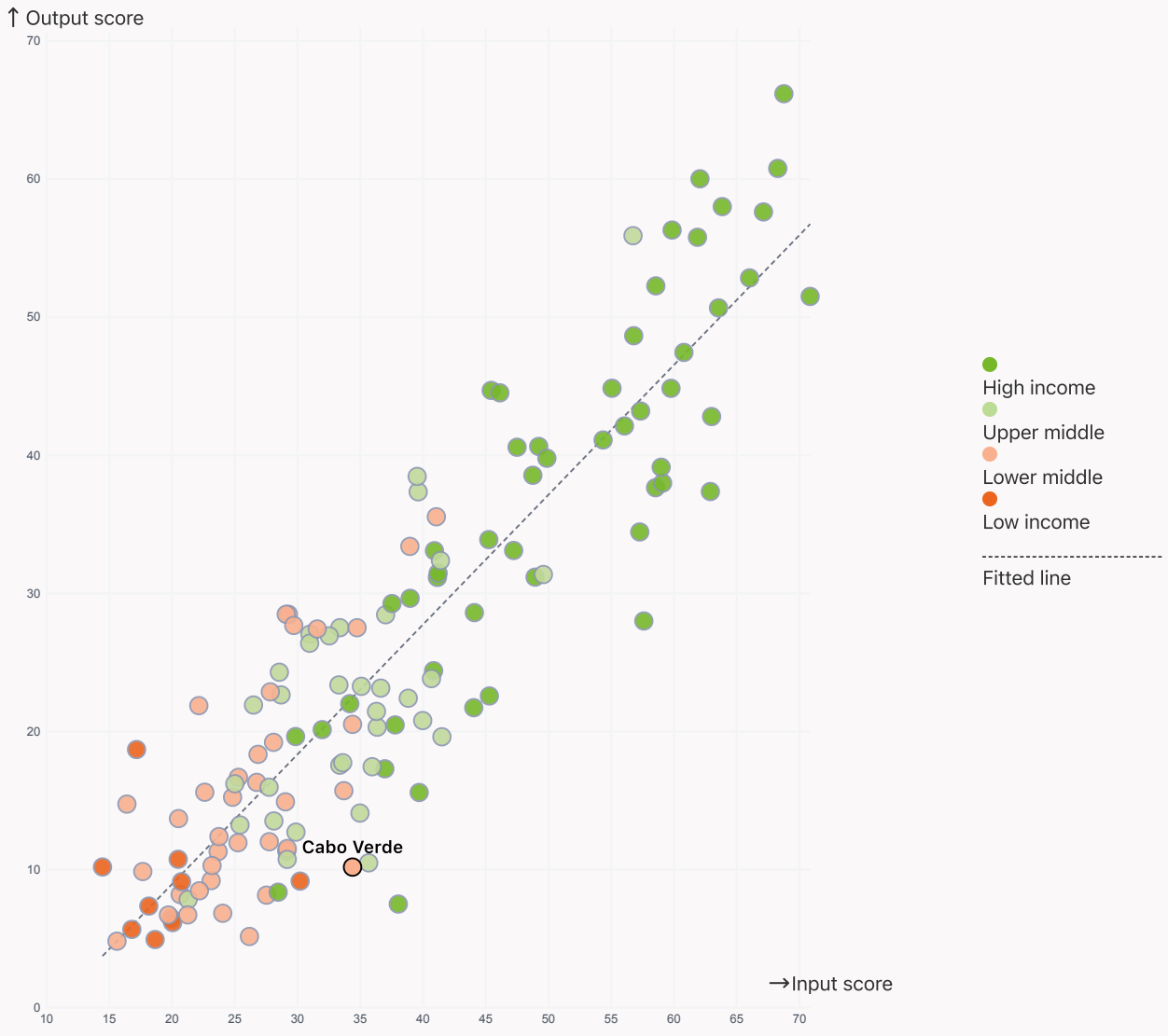


Effectively translating innovation investments into innovation outputs

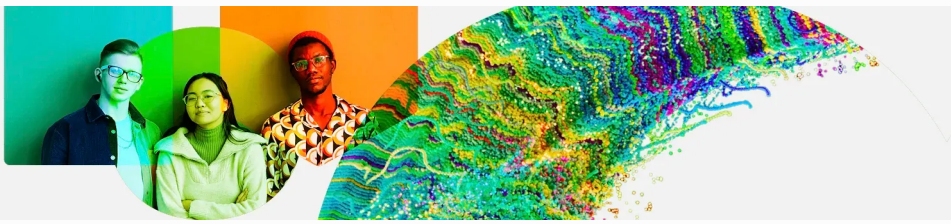
The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.

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

> Relationship between innovation inputs and outputs

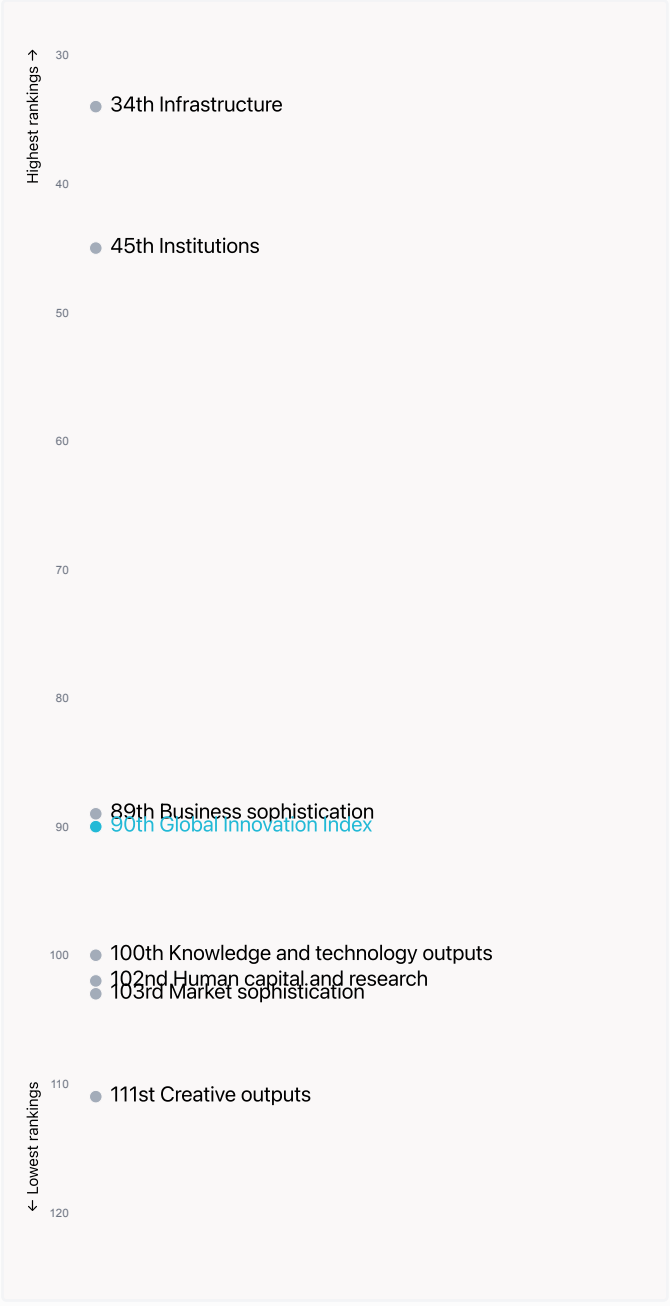


Global Innovation Index 2024



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



Highest rankings

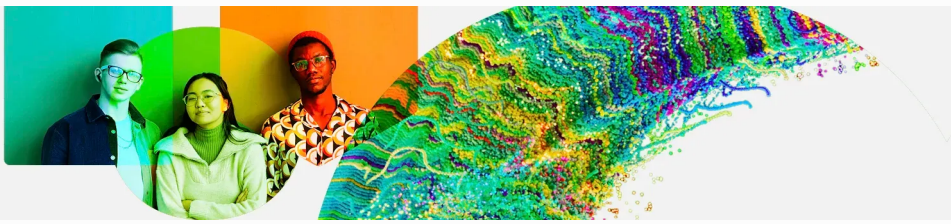
Cabo Verde ranks highest in Infrastructure (34th), Institutions (45th) and Business sophistication (89th).

Lowest rankings

Cabo Verde ranks lowest in Creative outputs (111st), Market sophistication (103rd) and Human capital and research (102nd).

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

Global Innovation Index 2024



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

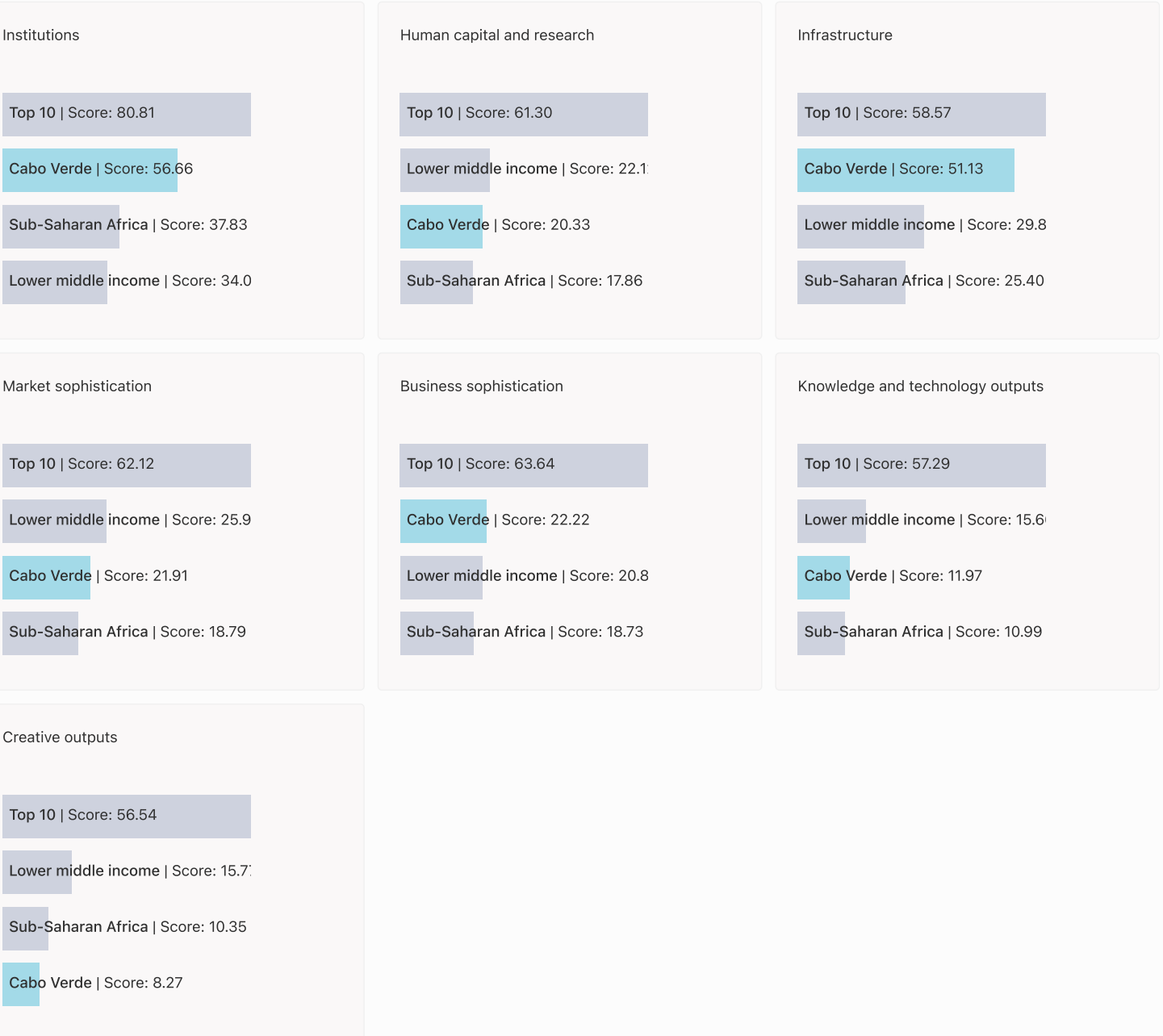
The charts shows the relative position of Cabo Verde (blue bar) against other economy groupings (grey bars), for each of the seven areas of the GII Index.

Lower-Middle-Income economies

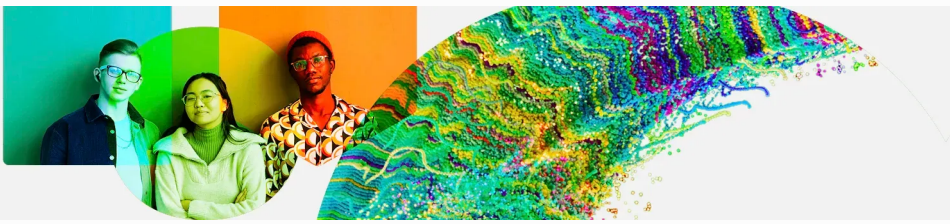
Cabo Verde performs above the lower-middle-income group average in Institutions, Infrastructure, Business sophistication.

Sub-Saharan Africa

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



Global Innovation Index 2024



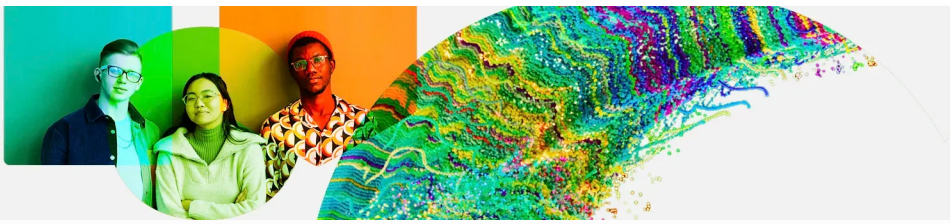
Innovation strengths and weaknesses in Cabo Verde

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

Cabo Verde's main innovation strengths are **Gross capital formation, % GDP** (rank 1), **Expenditure on education, % GDP** (rank 15) and **FDI net inflows, % GDP** (rank 27).

Strengths			Weaknesses		
Rank	Code	Indicator name	Rank	Code	Indicator name
1	3.2.3	Gross capital formation, % GDP	133	6.1.5	Citable documents H-index
15	2.1.1	Expenditure on education, % GDP	133	6.3.3	High-tech exports, % total trade
27	5.3.4	FDI net inflows, % GDP	132	7.2.4	Creative goods exports, % total trade
36	5.3.3	ICT services imports, % total trade	132	4.3.3	Domestic market scale, bn PPP$
39	1.3.1	Policy stability for doing business†	130	4.3.1	Applied tariff rate, weighted avg., %
40	1.1.1	Operational stability for businesses*	125	5.3.2	High-tech imports, % total trade
50	1.2.2	Rule of law*	102	5.2.5	Patent families/bn PPP$ GDP
51	6.2.3	Software spending, % GDP	75	2.3.4	QS university ranking, top 3*
51	6.3.5	ISO 9001 quality/bn PPP$ GDP	49	6.2.2	Unicorn valuation, % GDP
54	4.1.2	Domestic credit to private sector, % GDP	41	2.3.3	Global corporate R&D investors, top 3, mn USD

Global Innovation Index 2024



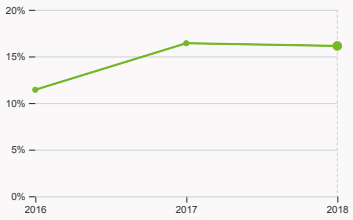
Cabo Verde's innovation system

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

Innovation inputs in Cabo Verde

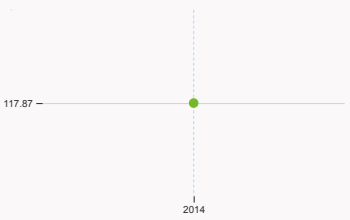
2.1.1 **Expenditure on education**

was equal to 6.04 % GDP in 2021, up by 1.9 percentage points from the year prior – and equivalent to an indicator rank of 15.



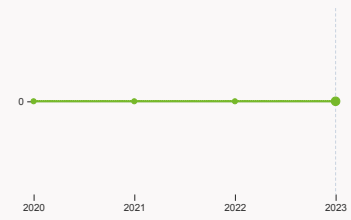
2.2.2 **Graduates in science and engineering**

was equal to 16.13 % of total graduates in 2018, down by 0.29 percentage points from the year prior – and equivalent to an indicator rank of 96.



2.3.1 **Researchers**

was equal to 117.87 FTE per million population in 2014 – and equivalent to an indicator rank of 91.

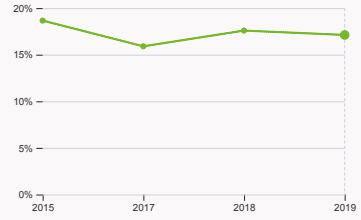


2.3.4 **QS university ranking**

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.

4.3.2 **Domestic industry diversification**

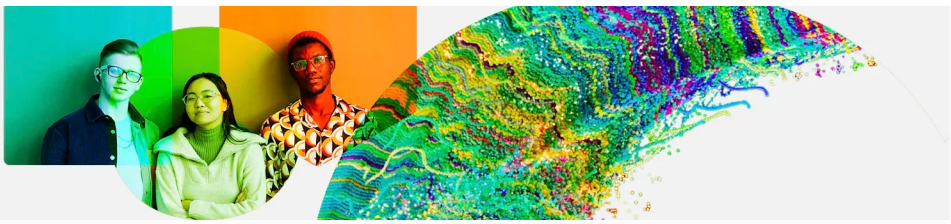
was equal to an index score of 0.24 in 2018, down by 2.78% from the year prior – and equivalent to an indicator rank of 89.



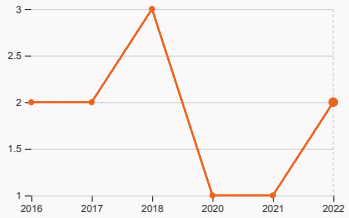
5.1.1 **Knowledge-intensive employment**

was equal to 17.12 % in 2019, down by 0.47 percentage points from the year prior – and equivalent to an indicator rank of 87.

Global Innovation Index 2024

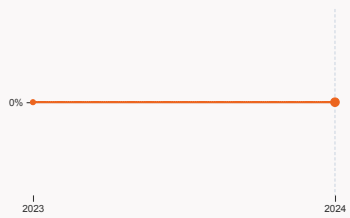


Innovation outputs in Cabo Verde



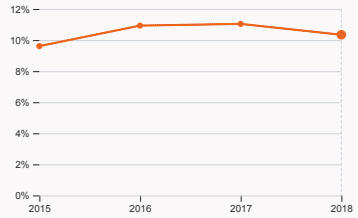
6.1.1 Patents by origin

was equal to 2 patents in 2022, up by 100% from the year prior – and equivalent to an indicator rank of 85.



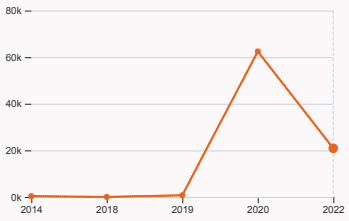
6.2.2 Unicorn valuation

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



6.2.4 High-tech manufacturing

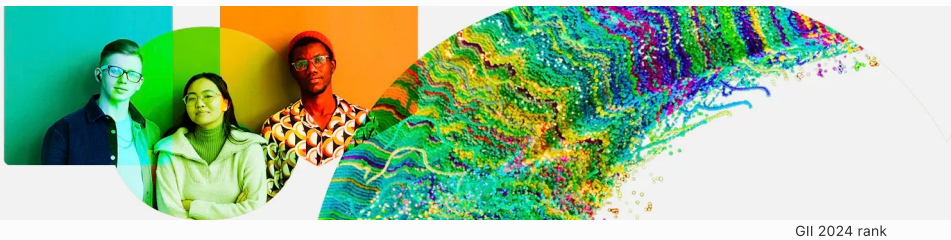
was equal to 10.34 % of total manufacturing output in 2018, down by 0.7 percentage points from the year prior – and equivalent to an indicator rank of 85.



6.3.3 High-tech exports

was equal to 20.88 thousands USD in 2022, down by 66.57% from the year prior – and equivalent to an indicator rank of 133.

Global Innovation Index 2024



Cabo Verde

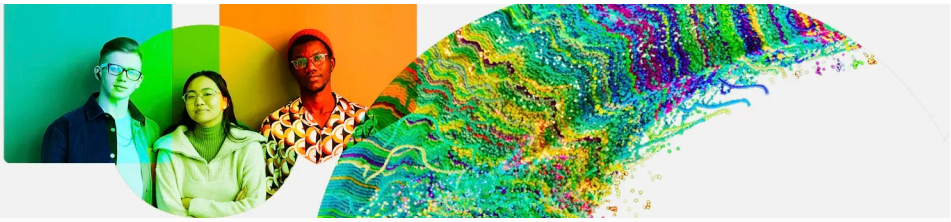
GII 2024 rank **90**

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
113	68	Lower middle	SSA	0.5	5.7	9,909.4

	Score / Value	Rank
Institutions	56.7	45
1.1 Institutional environment	56.6	56
1.1.1 Operational stability for businesses*	70	40
1.1.2 Government effectiveness*	43.3	71
1.2 Regulatory environment	51.5	54
1.2.1 Regulatory quality*	48.8	57
1.2.2 Rule of law*	54.3	50
1.3 Business environment	61.8	[31]
1.3.1 Policy stability for doing business†	61.8	39
1.3.2 Entrepreneurship policies and culture†	n/a	n/a
Human capital and research	20.3	102
2.1 Education	48.1	72
2.1.1 Expenditure on education, % GDP	6	15
2.1.2 Government funding/pupil, secondary, % GDP/cap	14.1	73
2.1.3 School life expectancy, years	11.9	94
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	109
2.2.1 Tertiary enrolment, % gross	20.2	103
2.2.2 Graduates in science and engineering, %	16.1	96
2.2.3 Tertiary inbound mobility, %	1.4	85
2.3 Research and development (R&D)	0.3	112
2.3.1 Researchers, FTE/mn pop.	117.9	91
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	51.1	34
3.1 Information and communication technologies (ICTs)	47.2	104
3.1.1 ICT access*	72.7	91
3.1.2 ICT use*	48.7	108
3.1.3 Government's online service*	44.4	100
3.1.4 E-participation*	23.3	116
3.2 General infrastructure	100	[1]
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	46.2	1
3.3 Ecological sustainability	6.2	124
3.3.1 GDP/unit of energy use	n/a	n/a
3.3.2 Low-carbon energy use, %	8.1	91
3.3.3 ISO 14001 environment/bn PPP$ GDP	0.4	101
Market sophistication	21.9	[103]
4.1 Credit	19.5	[88]
4.1.1 Finance for startups and scaleups†	n/a	n/a
4.1.2 Domestic credit to private sector, % GDP	58.1	54
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	24.4	120
4.3.1 Applied tariff rate, weighted avg., %	11.6	130
4.3.2 Domestic industry diversification	64.7	89
4.3.3 Domestic market scale, bn PPP$	5.7	132

	Score / Value	Rank
Business sophistication	22.2	89
5.1 Knowledge workers	23.9	[94]
5.1.1 Knowledge-intensive employment, %	17.1	87
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	87
5.2 Innovation linkages	19.8	86
5.2.1 Public Research-Industry co-publications, %	0.8	102
5.2.2 University-industry R&D collaboration†	34.3	91
5.2.3 State of cluster development†	37.8	88
5.2.4 Joint venture/strategic alliance deals/bn PPP$ GDP	n/a	n/a
5.2.5 Patent families/bn PPP$ GDP	0	102
5.3 Knowledge absorption	23	78
5.3.1 Intellectual property payments, % total trade	0.3	89
5.3.2 High-tech imports, % total trade	3.7	125
5.3.3 ICT services imports, % total trade	1.8	36
5.3.4 FDI net inflows, % GDP	4.6	27
5.3.5 Research talent, % in businesses	n/a	n/a
Knowledge and technology outputs	12	100
6.1 Knowledge creation	10.1	[83]
6.1.1 Patents by origin/bn PPP$ GDP	0.4	85
6.1.2 PCT patents by origin/bn PPP$ GDP	n/a	n/a
6.1.3 Utility models by origin/bn PPP$ GDP	-	-
6.1.4 Scientific and technical articles/bn PPP$ GDP	11.2	67
6.1.5 Citable documents H-index	0	133
6.2 Knowledge impact	19.9	102
6.2.1 Labor productivity growth, %	-0.1	99
6.2.2 Unicorn valuation, % GDP	0	49
6.2.3 Software spending, % GDP	0.2	51
6.2.4 High-tech manufacturing, %	10.3	85
6.3 Knowledge diffusion	5.9	113
6.3.1 Intellectual property receipts, % total trade	0.004	102
6.3.2 Production and export complexity	n/a	n/a
6.3.3 High-tech exports, % total trade	0.002	133
6.3.4 ICT services exports, % total trade	1	83
6.3.5 ISO 9001 quality/bn PPP$ GDP	5.7	51
Creative outputs	8.3	[111]
7.1 Intangible assets	12	[96]
7.1.1 Intangible asset intensity, top 15, %	n/a	n/a
7.1.2 Trademarks by origin/bn PPP$ GDP	19.9	88
7.1.3 Global brand value, top 5,000, % GDP	n/a	n/a
7.1.4 Industrial designs by origin/bn PPP$ GDP	1.1	57
7.2 Creative goods and services	5.9	[90]
7.2.1 Cultural and creative services exports, % total trade	0.4	60
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	0.0002	132
7.3 Online creativity	3.2	127
7.3.1 Top-level domains (TLDs)/th pop. 15–69	2.1	77
7.3.2 GitHub commits/mn pop. 15–69	4.3	85
7.3.3 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, 🕓 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.



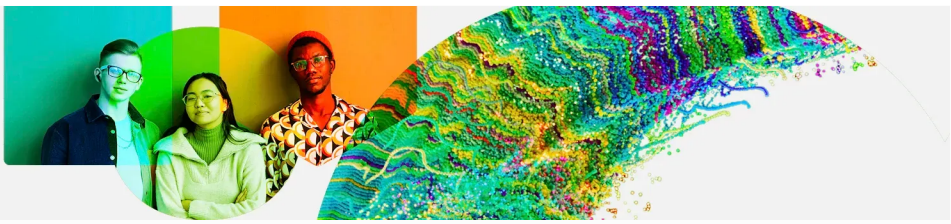
Data availability

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

Cabo Verde has missing data for twenty five indicators and outdated data for sixteen indicators.

Missing data for Cabo Verde

Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture†	n/a	2023	Global Entrepreneurship Monitor
2.1.4	PISA scales in reading, maths and science	n/a	2022	OECD, PISA
2.3.2	Gross expenditure on R&D, % GDP	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.1	Electricity output, GWh/mn pop.	n/a	2022	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 The Logistics Performance Index and its Indicators.
3.3.1	GDP/unit of energy use	n/a	2021	International Energy Agency
4.1.1	Finance for startups and scaleups†	n/a	2023	Global Entrepreneurship Monitor
4.1.3	Loans from microfinance institutions, % GDP	n/a	2022	International Monetary Fund, Financial Access Survey (FAS)
4.2.1	Market capitalization, % GDP	n/a	2022	World Federation of Exchanges; World Bank
4.2.2	Venture capital (VC) investors, deals/bn PPP$ GDP	n/a	2023	LSEG Data & Analytics; International Monetary Fund
4.2.3	VC recipients, deals/bn PPP$ GDP	n/a	2023	LSEG Data & Analytics; International Monetary Fund
4.2.4	VC received, value, % GDP	n/a	2023	LSEG Data & Analytics; International Monetary Fund
5.1.2	Firms offering formal training, %	n/a	2023	World Bank Enterprise Surveys
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
5.2.4	Joint venture/strategic alliance deals/bn PPP$	n/a	2023	LSEG Data & Analytics; International Monetary Fund

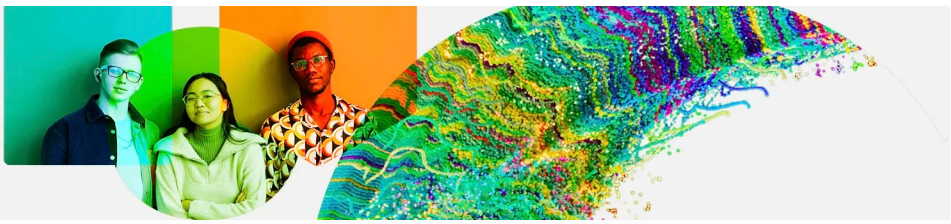


Code	Indicator name	Economy Year	Model Year	Source
	GDP			
5.3.5	Research talent, % in businesses	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
6.1.2	PCT patents by origin/bn PPP$ GDP	n/a	2023	World Intellectual Property Organization; International Monetary Fund
6.1.3	Utility models by origin/bn PPP$ GDP	n/a	2022	World Intellectual Property Organization; International Monetary Fund
6.3.2	Production and export complexity	n/a	2021	Harvard University, Growth Lab
7.1.1	Intangible asset intensity, top 15, %	n/a	2023	Brand Finance
7.1.3	Global brand value, top 5,000, % GDP	n/a	2024	Brand Finance; International Monetary Fund
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
7.3.3	Mobile app creation/bn PPP$ GDP	n/a	2023	data.ia (a Sensor Tower Company); International Monetary Fund

Outdated data for Cabo Verde

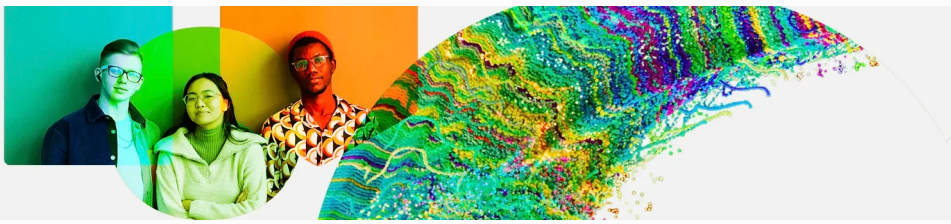
Code	Indicator name	Economy Year	Model Year	Source
1.3.1	Policy stability for doing business†	2022	2023	World Economic Forum, Executive Opinion Survey (EOS)
2.1.1	Expenditure on education, % GDP	2021	2022	UNESCO Institute for Statistics
2.1.2	Government funding/pupil, secondary, % GDP/cap	2019	2020	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	2018	2022	UNESCO Institute for Statistics
2.1.5	Pupil–teacher ratio, secondary	2021	2022	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2018	2022	UNESCO Institute for Statistics
2.2.2	Graduates in science and engineering, %	2018	2021	UNESCO Institute for Statistics; Eurostat; OECD
2.2.3	Tertiary inbound mobility, %	2018	2022	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	2014	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
4.3.2	Domestic industry diversification	2018	2021	United Nations Industrial Development Organization (UNIDO), Industrial Statistics Database (INDSTAT) Rev.3 and 4

Global Innovation Index 2024



Code	Indicator name	Economy Year	Model Year	Source
5.1.1	Knowledge-intensive employment, %	2019	2022	International Labour Organization
5.1.5	Females employed w/advanced degrees, %	2019	2023	International Labour Organization
5.2.2	University-industry R&D collaboration†	2022	2023	World Economic Forum, Executive Opinion Survey (EOS)
5.2.3	State of cluster development†	2022	2023	World Economic Forum, Executive Opinion Survey (EOS)
6.2.4	High-tech manufacturing, %	2018	2021	United Nations Industrial Development Organization
7.1.4	Industrial designs by origin/bn PPP$ GDP	2020	2022	World Intellectual Property Organization; International Monetary Fund

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.