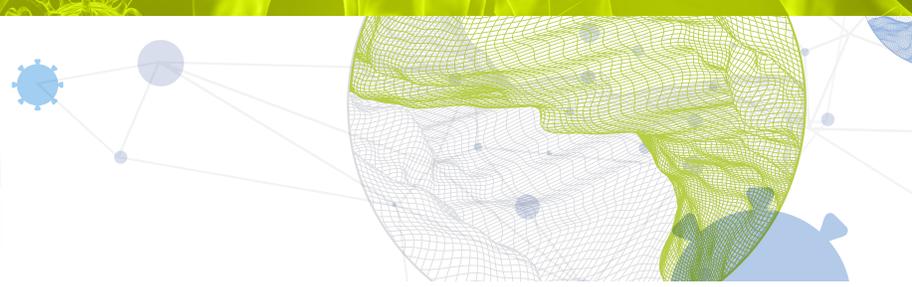




Global Innovation Index 2021



CABO VERDE

89th

Cabo Verde ranks 89th among the 132 economies featured in the GII 2021.

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 Cabo Verde 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 Cabo Verde in the GII 2021 is between ranks 89 and 97.

Rankings for Cabo Verde (2019–2021)

	GII	Innovation inputs	Innovation outputs
2021	89	96	88
2020	100	99	90
2019			

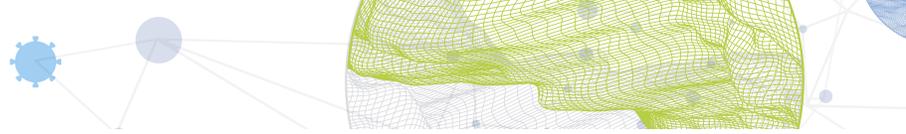
- Cabo Verde performs better in innovation outputs than innovation inputs in 2021.
- This year Cabo Verde ranks 96th in innovation inputs, higher than last year.
- As for innovation outputs, Cabo Verde ranks 88th. This position is higher than last year.

11th

Cabo Verde ranks 11th among the 34 lower middle-income group economies.

4th

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

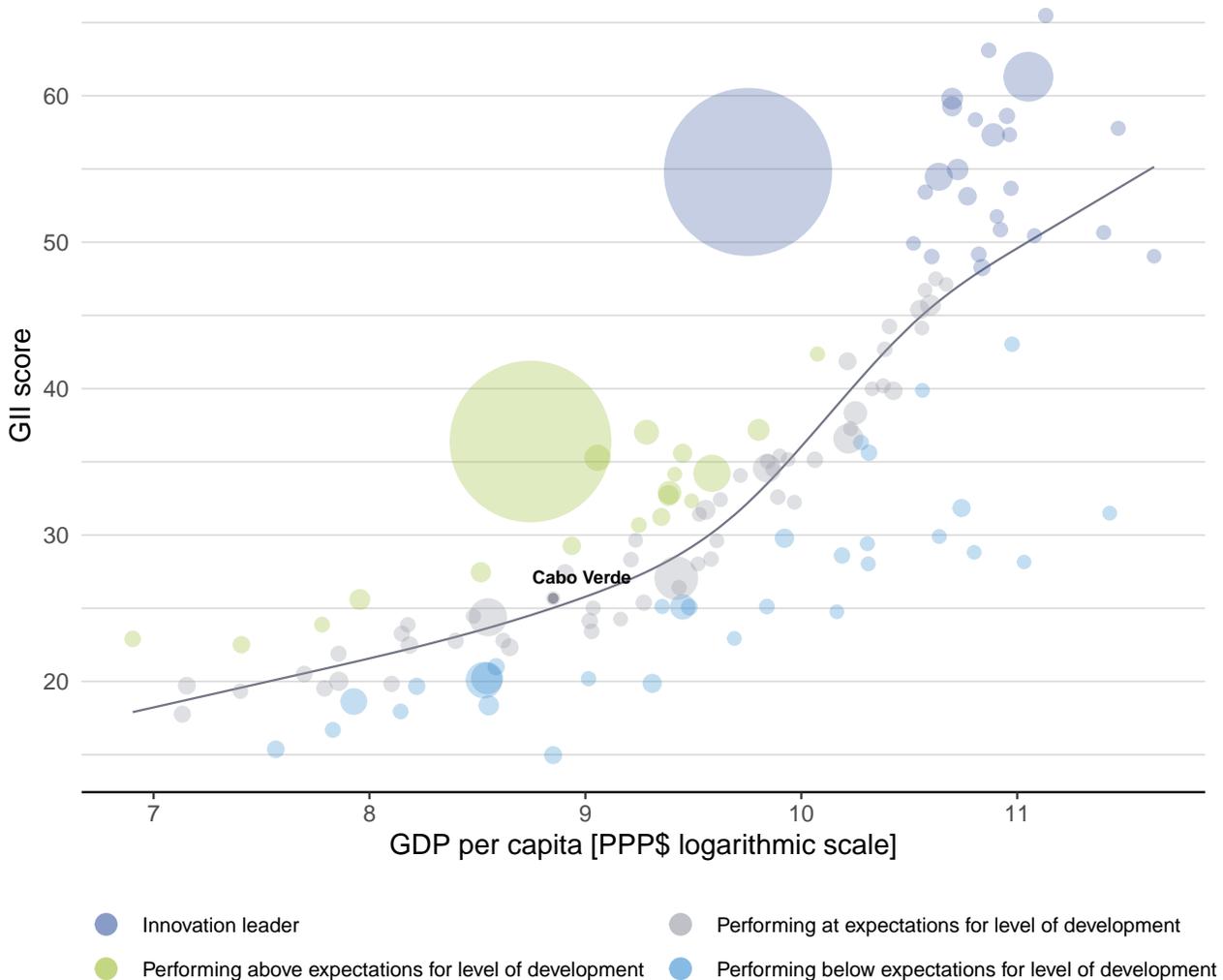


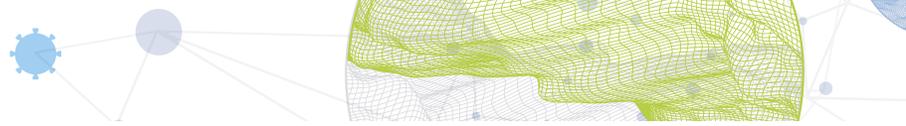
EXPECTED VS. OBSERVED INNOVATION PERFORMANCE

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

The positive relationship between innovation and development



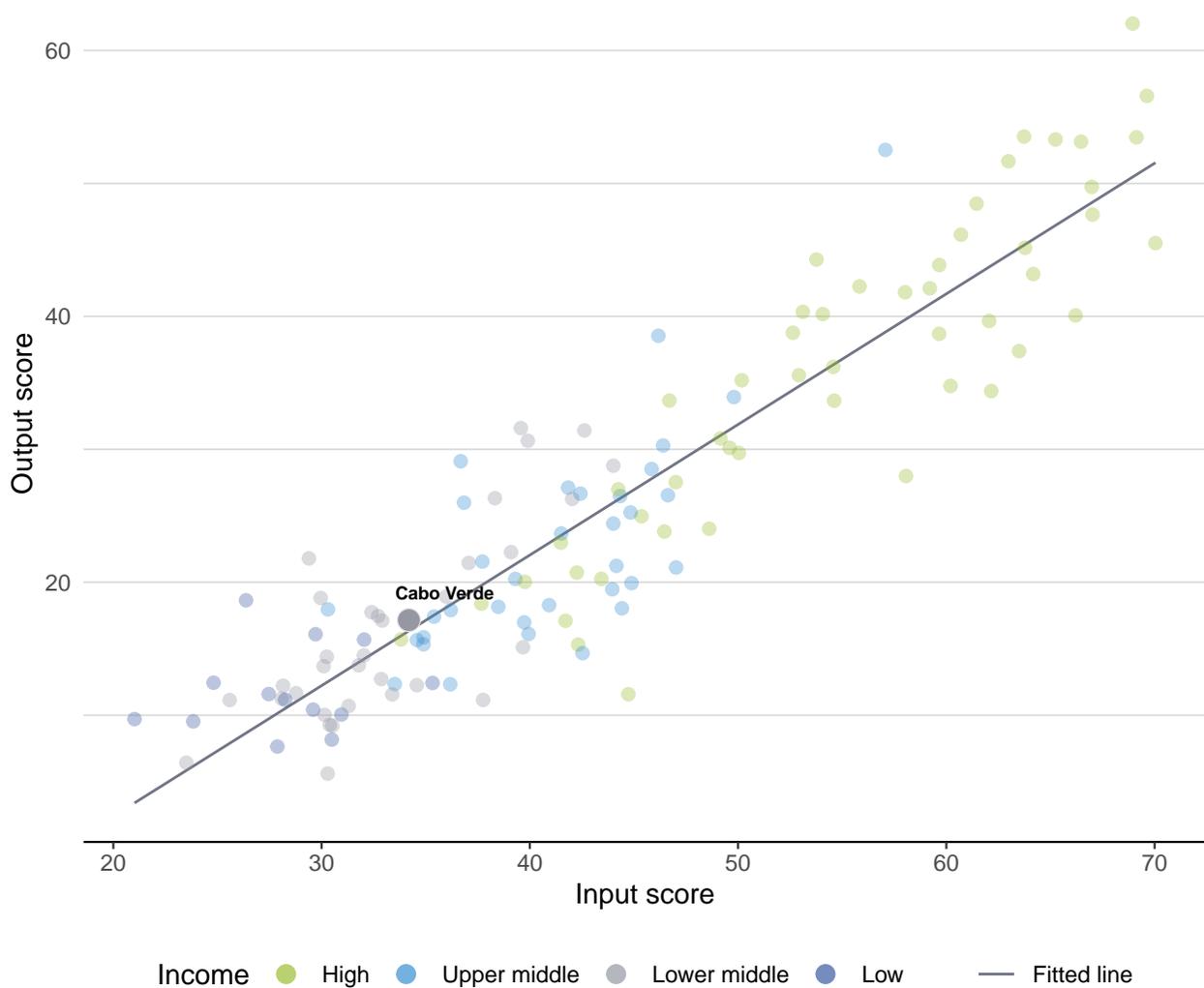


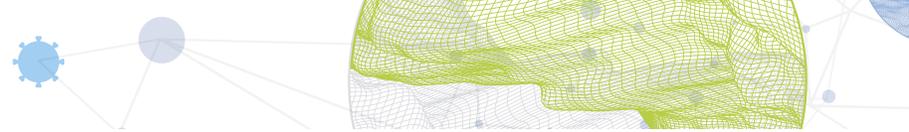
EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

Cabo Verde 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 Cabo Verde

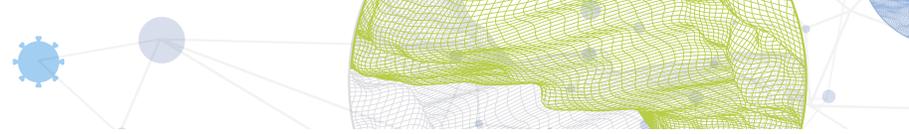


Lower middle-income group economies

Cabo Verde performs above the lower middle-income group average in four pillars, namely: Institutions; Infrastructure; Business sophistication; and, Creative outputs.

Sub-Saharan Africa

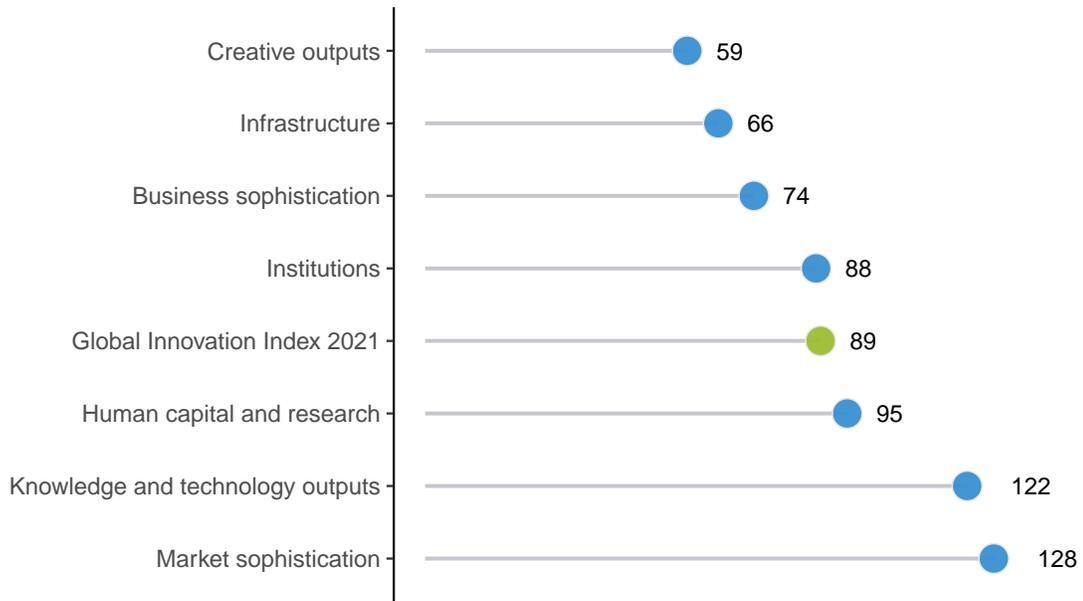
Cabo Verde performs above the regional average in five pillars, namely: Institutions; Human capital and research; Infrastructure; Business sophistication; and, Creative outputs.



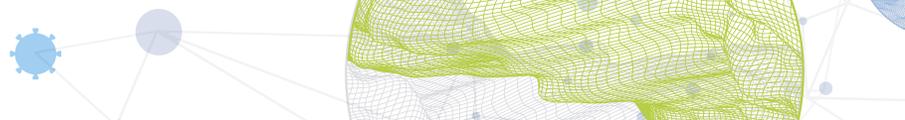
OVERVIEW OF RANKINGS IN THE SEVEN GII 2021 AREAS

Cabo Verde performs best in Creative outputs and its weakest performance is in Market sophistication.

The seven GII pillar ranks for Cabo Verde



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



INNOVATION STRENGTHS AND WEAKNESSES

The table below gives an overview of the strengths and weaknesses of Cabo Verde in the GII 2021.

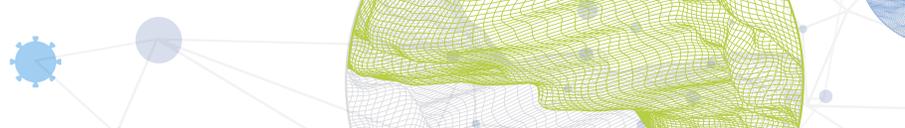
Strengths and weaknesses for Cabo Verde

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
1.1.1	Political and operational stability	37	1.3	Business environment	130
1.2.2	Rule of law	43	1.3.2	Ease of resolving insolvency	129
2.1.1	Expenditure on education, % GDP	31	2.3.3	Global corporate R&D investors, top 3, mn US\$	41
3.2.3	Gross capital formation, % GDP	5	2.3.4	QS university ranking, top 3	74
5.3.4	FDI net inflows, % GDP	17	4.2.1	Ease of protecting minority investors	128
6.2.2	New businesses/th pop. 15–64	36	4.3	Trade, diversification, and market scale	132
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	36	4.3.2	Domestic industry diversification	107
7.1.3	Industrial designs by origin/bn PPP\$ GDP	16	4.3.3	Domestic market scale, bn PPP\$	132
7.2.4	Printing and other media, % manufacturing	20	5.2.5	Patent families/bn PPP\$ GDP	100
7.3	Online creativity	42	5.3.2	High-tech imports, % total trade	124
7.3.3	Wikipedia edits/mn pop. 15–69	28	6.1.5	Citable documents H-index	132
			6.3	Knowledge diffusion	127
			6.3.3	High-tech exports, % total trade	131

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$	GII 2020 rank
88	96	Lower middle	SSF	0.6	3.9	6,980	100

		Score/ Value Rank			Score/ Value Rank		
	Institutions	57.0	88		Business sophistication	23.9	[74]
1.1	Political environment	63.7	49	5.1	Knowledge workers	23.6	[89]
1.1.1	Political and operational stability*	76.8	37	5.1.1	Knowledge-intensive employment, %	17.1	89
1.1.2	Government effectiveness*	57.2	56	5.1.2	Firms offering formal training, %	n/a	n/a
1.2	Regulatory environment	65.2	64	5.1.3	GERD performed by business, % GDP	n/a	n/a
1.2.1	Regulatory quality*	37.6	87	5.1.4	GERD financed by business, %	n/a	n/a
1.2.2	Rule of law*	60.3	43	5.1.5	Females employed w/advanced degrees, %	7.6	83
1.2.3	Cost of redundancy dismissal	17.4	73	5.2	Innovation linkages	26.7	[40]
1.3	Business environment	42.2	130	5.2.1	University-industry R&D collaboration†	41.1	72
1.3.1	Ease of starting a business*	84.5	93	5.2.2	State of cluster development and depth†	46.3	67
1.3.2	Ease of resolving insolvency*	0.0	129	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	100
	Human capital and research	21.1	95	5.3	Knowledge absorption	21.4	84
2.1	Education	47.9	73	5.3.1	Intellectual property payments, % total trade	0.8	50
2.1.1	Expenditure on education, % GDP	5.2	31	5.3.2	High-tech imports, % total trade	3.0	124
2.1.2	Government funding/pupil, secondary, % GDP/cap	19.7	49	5.3.3	ICT services imports, % total trade	1.4	55
2.1.3	School life expectancy, years	12.7	84	5.3.4	FDI net inflows, % GDP	5.7	17
2.1.4	PISA scales in reading, maths and science	n/a	n/a	5.3.5	Research talent, % in businesses	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	15.4	75				
2.2	Tertiary education	14.9	102		Knowledge and technology outputs	8.6	[122]
2.2.1	Tertiary enrolment, % gross	23.6	95	6.1	Knowledge creation	9.2	[85]
2.2.2	Graduates in science and engineering, %	16.1	93	6.1.1	Patents by origin/bn PPP\$ GDP	0.8	70
2.2.3	Tertiary inbound mobility, %	1.4	82	6.1.2	PCT patents by origin/bn PPP\$ GDP	n/a	n/a
2.3	Research and development (R&D)	0.6	108	6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	n/a
2.3.1	Researchers, FTE/mn pop.	123.5	85	6.1.4	Scientific and technical articles/bn PPP\$ GDP	14.4	59
2.3.2	Gross expenditure on R&D, % GDP	0.1	109	6.1.5	Citable documents H-index	0.0	132
2.3.3	Global corporate R&D investors, top 3, mn US\$	0.0	41	6.2	Knowledge impact	13.7	[118]
2.3.4	QS university ranking, top 3*	0.0	74	6.2.1	Labor productivity growth, %	n/a	n/a
				6.2.2	New businesses/th pop. 15–64	4.0	36
	Infrastructure	42.3	66	6.2.3	Software spending, % GDP	n/a	n/a
3.1	Information and communication technologies (ICTs)	49.0	95	6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	7.5	36
3.1.1	ICT access*	57.9	80	6.2.5	High-tech manufacturing, %	7.2	97
3.1.2	ICT use*	46.5	85	6.3	Knowledge diffusion	2.9	[127]
3.1.3	Government's online service*	50.0	106	6.3.1	Intellectual property receipts, % total trade	0.0	98
3.1.4	E-participation*	41.7	111	6.3.2	Production and export complexity	n/a	n/a
3.2	General infrastructure	60.0	[4]	6.3.3	High-tech exports, % total trade	0.0	131
3.2.1	Electricity output, GWh/mn pop.	n/a	n/a	6.3.4	ICT services exports, % total trade	0.9	86
3.2.2	Logistics performance*	n/a	n/a		Creative outputs	25.7	59
3.2.3	Gross capital formation, % GDP	42.2	5	7.1	Intangible assets	32.5	59
3.3	Ecological sustainability	17.8	113	7.1.1	Trademarks by origin/bn PPP\$ GDP	22.1	90
3.3.1	GDP/unit of energy use	n/a	n/a	7.1.2	Global brand value, top 5,000, % GDP	n/a	n/a
3.3.2	Environmental performance*	32.8	112	7.1.3	Industrial designs by origin/bn PPP\$ GDP	8.1	16
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.5	87	7.1.4	ICTs and organizational model creation†	44.6	98
	Market sophistication	26.6	128	7.2	Creative goods and services	11.0	[77]
4.1	Credit	29.0	111	7.2.1	Cultural and creative services exports, % total trade	0.3	61
4.1.1	Ease of getting credit*	35.0	118	7.2.2	National feature films/mn pop. 15–69	n/a	n/a
4.1.2	Domestic credit to private sector, % GDP	58.7	58	7.2.3	Entertainment and media market/th pop. 15–69	n/a	n/a
4.1.3	Microfinance gross loans, % GDP	n/a	n/a	7.2.4	Printing and other media, % manufacturing	1.8	20
4.2	Investment	24.0	[91]	7.2.5	Creative goods exports, % total trade	0.1	110
4.2.1	Ease of protecting minority investors*	24.0	128	7.3	Online creativity	26.8	42
4.2.2	Market capitalization, % GDP	n/a	n/a	7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	1.9	79
4.2.3	Venture capital investors, deals/bn PPP\$ GDP	n/a	n/a	7.3.2	Country-code TLDs/th pop. 15–69	2.0	71
4.2.4	Venture capital recipients, deals/bn PPP\$ GDP	n/a	n/a	7.3.3	Wikipedia edits/mn pop. 15–69	73.3	28
4.3	Trade, diversification, and market scale	26.7	132	7.3.4	Mobile app creation/bn PPP\$ GDP	n/a	n/a
4.3.1	Applied tariff rate, weighted avg., %	11.6	124				
4.3.2	Domestic industry diversification	49.2	107				
4.3.3	Domestic market scale, bn PPP\$	3.9	132				

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 Appendix IV for details, including the year of the data, at <http://globalinnovationindex.org>. Square brackets [] indicate that the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level.

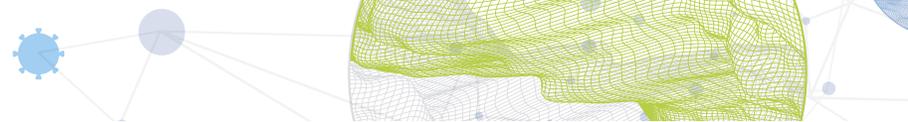


DATA AVAILABILITY

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

Missing data for Cabo Verde

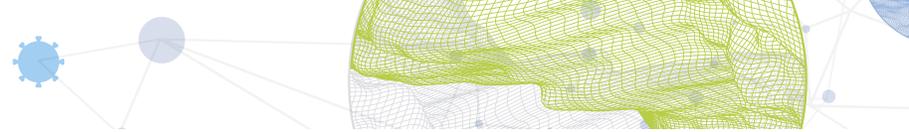
Code	Indicator name	Economy year	Model year	Source
2.1.4	PISA scales in reading, maths and science	n/a	2018	OECD Programme for International Student Assessment (PISA)
3.2.1	Electricity output, GWh/mn pop.	n/a	2018	International Energy Agency
3.2.2	Logistics performance	n/a	2018	World Bank
3.3.1	GDP/unit of energy use	n/a	2018	International Energy Agency
4.1.3	Microfinance gross loans, % GDP	n/a	2018	Microfinance Information Exchange
4.2.2	Market capitalization, % GDP	n/a	2019	World Federation of Exchanges
4.2.3	Venture capital investors, deals/bn PPP\$ GDP	n/a	2020	Refinitiv Eikon
4.2.4	Venture capital recipients, deals/bn PPP\$ GDP	n/a	2020	Refinitiv Eikon
5.1.2	Firms offering formal training, %	n/a	2019	World Bank
5.1.3	GERD performed by business, % GDP	n/a	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.1.4	GERD financed by business, %	n/a	2018	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.2.3	GERD financed by abroad, % GDP	n/a	2018	UNESCO Institute for Statistics
5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP	n/a	2020	Refinitiv
5.3.5	Research talent, % in businesses	n/a	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
6.1.2	PCT patents by origin/bn PPP\$ GDP	n/a	2020	World Intellectual Property Organization
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2019	World Intellectual Property Organization
6.2.1	Labor productivity growth, %	n/a	2020	The Conference Board



Code	Indicator name	Economy year	Model year	Source
6.2.3	Software spending, % GDP	n/a	2020	IHS Markit
6.3.2	Production and export complexity	n/a	2018	Growth Lab, Harvard University
7.1.2	Global brand value, top 5,000, % GDP	n/a	2020	Brand Finance
7.2.2	National feature films/mn pop. 15–69	n/a	2017	UNESCO Institute for Statistics
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2020	PwC
7.3.4	Mobile app creation/bn PPP\$ GDP	n/a	2020	App Annie

Outdated data for Cabo Verde

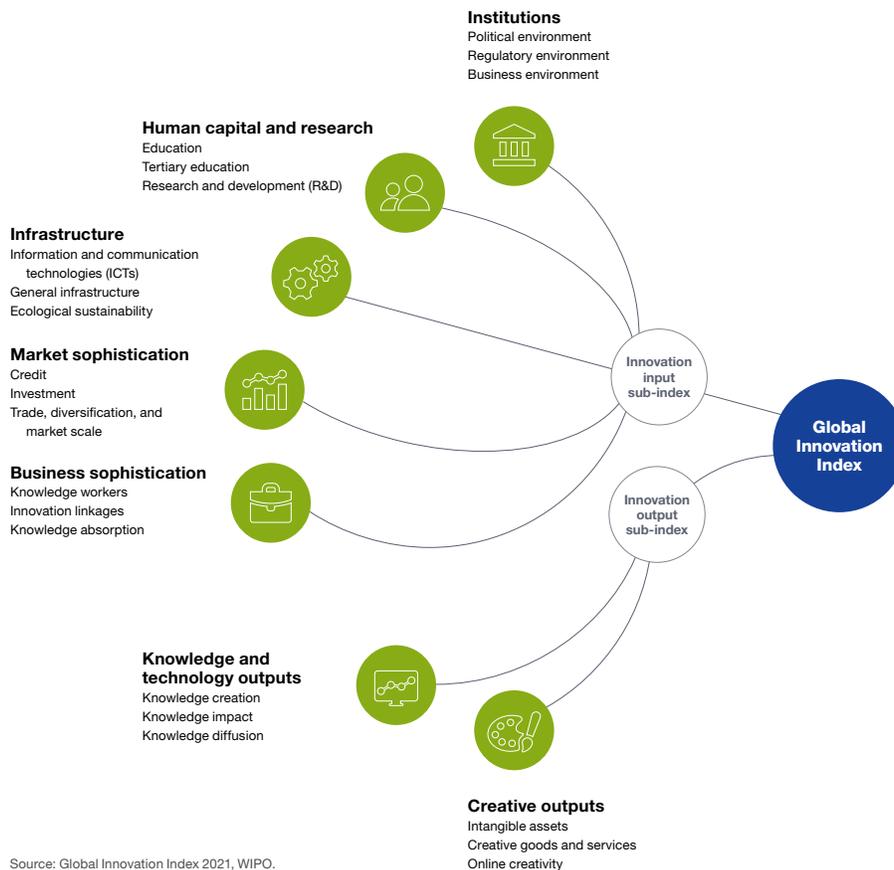
Code	Indicator name	Economy year	Model year	Source
2.1.5	Pupil-teacher ratio, secondary	2018	2019	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	2014	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
2.3.2	Gross expenditure on R&D, % GDP	2011	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
4.3.2	Domestic industry diversification	2017	2018	United Nations Industrial Development Organization
6.1.1	Patents by origin/bn PPP\$ GDP	2018	2019	World Intellectual Property Organization
6.2.5	High-tech manufacturing, %	2017	2018	United Nations Industrial Development Organization
6.3.3	High-tech exports, % total trade	2018	2019	United Nations, COMTRADE
7.1.3	Industrial designs by origin/bn PPP\$ GDP	2018	2019	World Intellectual Property Organization
7.2.4	Printing and other media, % manufacturing	2017	2018	United Nations Industrial Development Organization
7.2.5	Creative goods exports, % total trade	2012	2019	United Nations, COMTRADE



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.