



BURKINA FASO

120th Burkina Faso ranks 120th 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 Burkina Faso 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 Burkina Faso in the GII 2022 is between ranks 119 and 126.

Rankings for Burkina Faso (2020–2022)

GIIYR	GII	Innovation inputs	Innovation outputs
2020	118	106	124
2021	115	108	123
2022	120	114	124

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

5th Burkina Faso ranks 5th among the 12 low-income group economies.

17th Burkina Faso ranks 17th among the 27 economies in Sub-Saharan Africa.

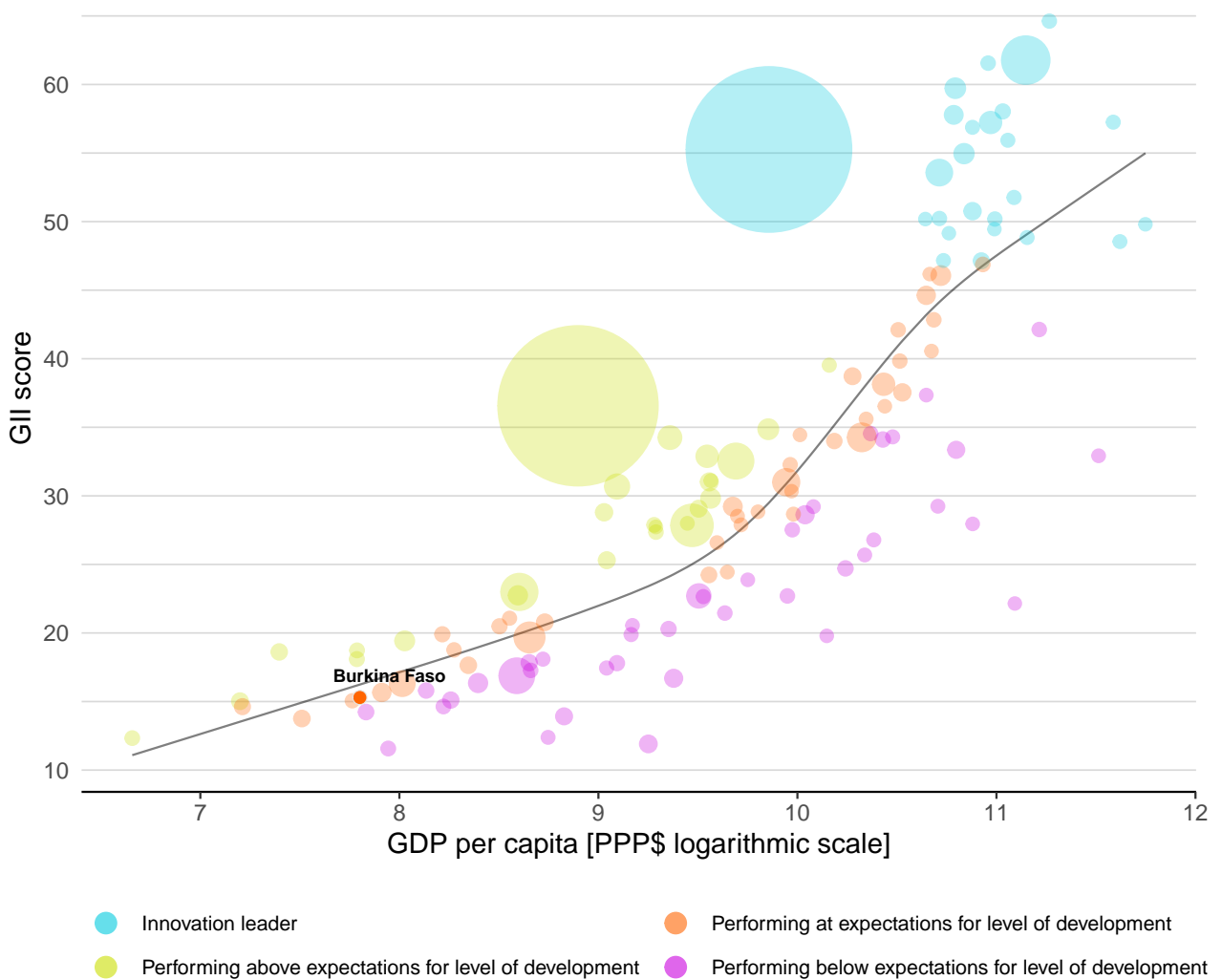


EXPECTED VS. OBSERVED INNOVATION PERFORMANCE

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, Burkina Faso's performance is at expectations for its level of development.

The positive relationship between innovation and development



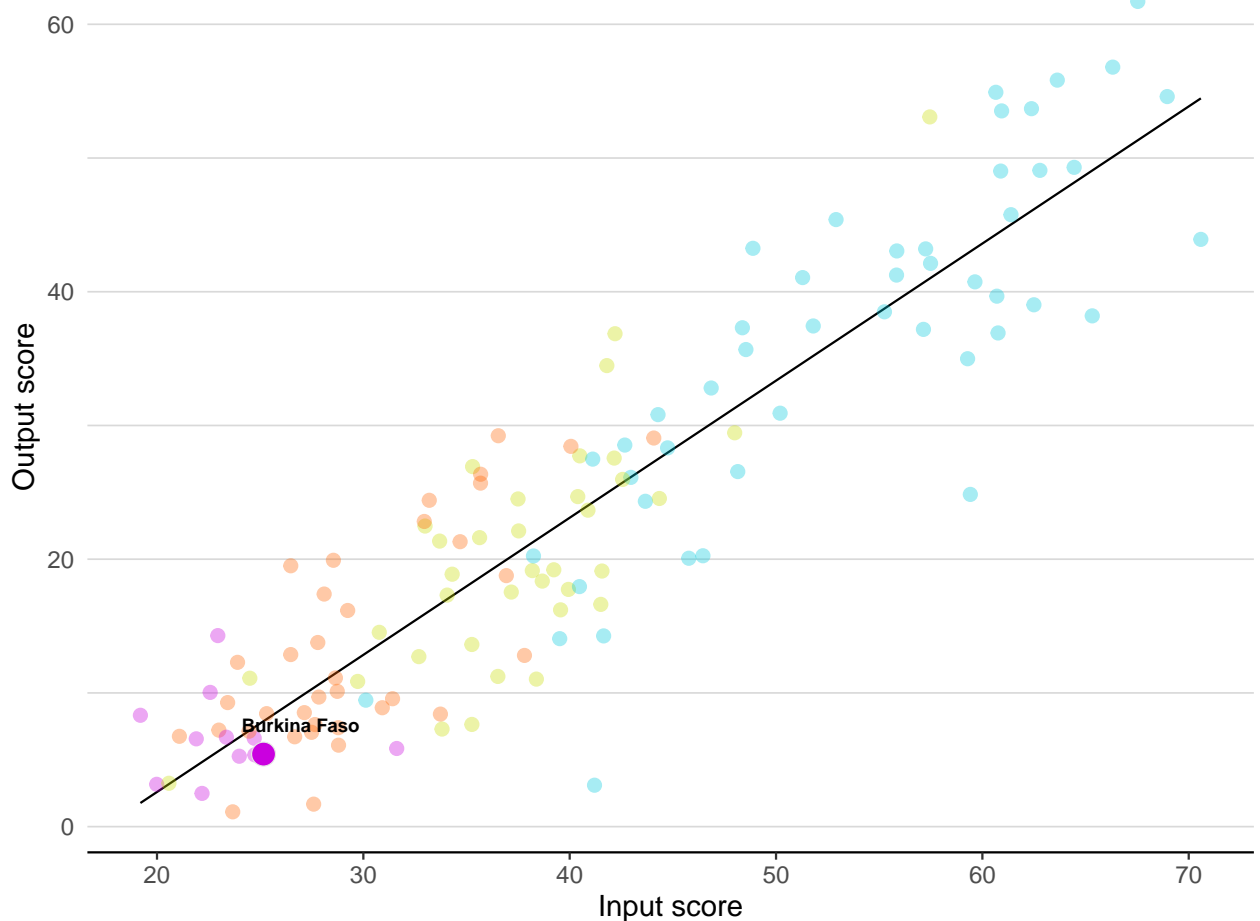


EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

Burkina Faso produces less innovation outputs relative to its level of innovation investments.

Innovation input to output performance



Income ● High income ● Upper middle ● Lower middle ● Low income — Fitted line



BENCHMARKING AGAINST OTHER LOW-INCOME GROUP ECONOMIES AND SUB-SAHARAN AFRICA

The seven GII pillar scores for Burkina Faso



Low-income group economies

Burkina Faso performs above the low-income group average in five pillars, namely: Institutions; Human capital and research; Infrastructure; Market sophistication; and, Knowledge and technology outputs.

Sub-Saharan Africa

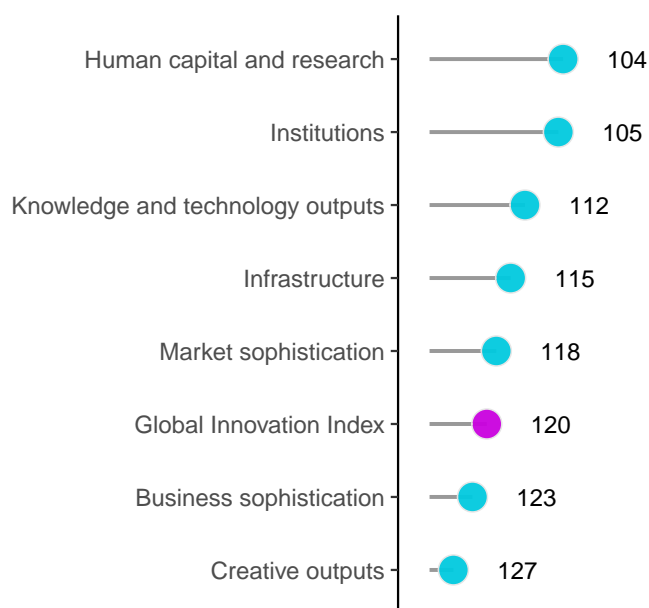
Burkina Faso performs above the regional average in Human capital and research.



OVERVIEW OF RANKINGS IN THE SEVEN GII 2022 AREAS

Burkina Faso performs best in Human capital and research and its weakest performance is in Creative outputs.

The seven GII pillar ranks for Burkina Faso



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

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

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



INNOVATION STRENGTHS AND WEAKNESSES

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

Strengths and weaknesses for Burkina Faso

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
1.2.3	Cost of redundancy dismissal	32	2.3.3	Global corporate R&D investors, top 3, mn USD	38
1.3.1	Policies for doing business	73	2.3.4	QS university ranking, top 3	72
2.1.1	Expenditure on education, % GDP	25	3.2.1	Electricity output, GWh/mn pop.	125
2.2.2	Graduates in science and engineering, %	66	4.1.1	Finance for startups and scaleups	72
3.2.3	Gross capital formation, % GDP	62	4.2.4	Venture capital received, value, % GDP	101
4.1.3	Loans from microfinance institutions, % GDP	17	5.2.2	State of cluster development and depth	127
4.2.3	Venture capital recipients, deals/bn PPP\$ GDP	43	6.1.2	PCT patents by origin/bn PPP\$ GDP	101
5.2.3	GERD financed by abroad, % GDP	55	7.1.3	Global brand value, top 5,000, % GDP	77
5.3.3	ICT services imports, % total trade	36	7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	125
6.2.1	Labor productivity growth, %	40	7.3.2	Country-code TLDs/th pop. 15–69	125
			7.3.3	GitHub commit pushes received/mn pop. 15–69	129

Burkina Faso

120

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
124	114	Low	SSA	21.5	52.6	2,444

Institutions		Score/Value	Rank
46.3			105
1.1 Political environment		43.1	121
1.1.1 Political and operational stability*		50.9	121
1.1.2 Government effectiveness*		35.3	107
1.2 Regulatory environment		65.0	66 ●
1.2.1 Regulatory quality*		34.5	96
1.2.2 Rule of law*		35.2	89
1.2.3 Cost of redundancy dismissal		10.5	32 ●
1.3 Business environment		30.8	108
1.3.1 Policies for doing business [†]	⊙	47.3	73 ●
1.3.2 Entrepreneurship policies and culture*	⊙	14.2	65

Human capital and research		Score/Value	Rank
18.1			104 ◆
2.1 Education		38.4	101
2.1.1 Expenditure on education, % GDP		5.5	25 ● ◆
2.1.2 Government funding/pupil, secondary, % GDP/cap	⊙	15.7	78
2.1.3 School life expectancy, years		9.1	109
2.1.4 PISA scales in reading, maths and science		n/a	n/a
2.1.5 Pupil-teacher ratio, secondary		20.9	97
2.2 Tertiary education		14.9	102
2.2.1 Tertiary enrolment, % gross		7.8	117
2.2.2 Graduates in science and engineering, %		20.3	66 ●
2.2.3 Tertiary inbound mobility, %		2.1	77
2.3 Research and development (R&D)		0.9	98
2.3.1 Researchers, FTE/mn pop.		n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP		0.2	84
2.3.3 Global corporate R&D investors, top 3, mn USD		0.0	38 ○ ◆
2.3.4 QS university ranking, top 3*		0.0	72 ○ ◆

Infrastructure		Score/Value	Rank
27.3			115
3.1 Information and communication technologies (ICTs)		43.4	116
3.1.1 ICT access*		54.6	117
3.1.2 ICT use*		21.3	124
3.1.3 Government's online service*		46.5	110
3.1.4 E-participation*		51.2	99
3.2 General infrastructure		19.9	109
3.2.1 Electricity output, GWh/mn pop.	⊙	91.5	125 ○
3.2.2 Logistics performance*		26.5	86
3.2.3 Gross capital formation, % GDP		24.1	62 ●
3.3 Ecological sustainability		18.5	101
3.3.1 GDP/unit of energy use		8.0	92
3.3.2 Environmental performance*		35.5	89 ◆
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP		0.1	124

Market sophistication		Score/Value	Rank
17.5			118
4.1 Credit		19.1	87 ◆
4.1.1 Finance for startups and scaleups*	⊙	19.1	72 ○
4.1.2 Domestic credit to private sector, % GDP		28.3	98 ◆
4.1.3 Loans from microfinance institutions, % GDP		2.0	17 ●
4.2 Investment		6.1	[69]
4.2.1 Market capitalization, % GDP		n/a	n/a
4.2.2 Venture capital investors, deals/bn PPP\$ GDP		n/a	n/a
4.2.3 Venture capital recipients, deals/bn PPP\$ GDP		0.0	43 ●
4.2.4 Venture capital received, value, % GDP		0.0	101 ○ ◆
4.3 Trade, diversification, and market scale		27.4	116
4.3.1 Applied tariff rate, weighted avg., %		7.2	102
4.3.2 Domestic industry diversification		n/a	n/a
4.3.3 Domestic market scale, bn PPP\$		52.6	103

Business sophistication		Score/Value	Rank
16.7			123
5.1 Knowledge workers		10.1	[120]
5.1.1 Knowledge-intensive employment, %	⊙	13.3	96 ◆
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, %	⊙	0.8	119
5.2 Innovation linkages		16.5	114
5.2.1 University-industry R&D collaboration [†]	⊙	30.2	115
5.2.2 State of cluster development and depth [†]	⊙	28.7	127 ○ ◆
5.2.3 GERD financed by abroad, % GDP	⊙	0.0	55 ●
5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP	⊙	0.0	117
5.2.5 Patent families/bn PPP\$ GDP		n/a	n/a
5.3 Knowledge absorption		23.4	96
5.3.1 Intellectual property payments, % total trade	⊙	0.0	117
5.3.2 High-tech imports, % total trade		4.1	122
5.3.3 ICT services imports, % total trade	⊙	2.1	36 ●
5.3.4 FDI net inflows, % GDP		1.2	95
5.3.5 Research talent, % in businesses		n/a	n/a

Knowledge and technology outputs		Score/Value	Rank
9.6			112
6.1 Knowledge creation		4.5	111
6.1.1 Patents by origin/bn PPP\$ GDP		0.2	101
6.1.2 PCT patents by origin/bn PPP\$ GDP		0.0	101 ○ ◆
6.1.3 Utility models by origin/bn PPP\$ GDP	⊙	0.1	59
6.1.4 Scientific and technical articles/bn PPP\$ GDP		10.5	83
6.1.5 Citable documents H-index		4.6	101
6.2 Knowledge impact		16.5	104
6.2.1 Labor productivity growth, %		1.8	40 ●
6.2.2 New businesses/th pop. 15-64	⊙	0.3	106
6.2.3 Software spending, % GDP		0.0	110
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP		0.6	116
6.2.5 High-tech manufacturing, %		n/a	n/a
6.3 Knowledge diffusion		7.7	112
6.3.1 Intellectual property receipts, % total trade	⊙	0.0	87
6.3.2 Production and export complexity		19.7	104
6.3.3 High-tech exports, % total trade		0.1	120
6.3.4 ICT services exports, % total trade	⊙	1.2	82

Creative outputs		Score/Value	Rank
1.3			127 ○
7.1 Intangible assets		1.5	126 ○
7.1.1 Intangible asset intensity, top 15, %		n/a	n/a
7.1.2 Trademarks by origin/bn PPP\$ GDP		6.5	115
7.1.3 Global brand value, top 5,000, % GDP		0.0	77 ○ ◆
7.1.4 Industrial designs by origin/bn PPP\$ GDP		0.3	98
7.2 Creative goods and services		2.2	[112]
7.2.1 Cultural and creative services exports, % total trade		0.2	73
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 Printing and other media, % manufacturing		n/a	n/a
7.2.5 Creative goods exports, % total trade		0.0	123
7.3 Online creativity		0.0	131 ○
7.3.1 Generic top-level domains (TLDs)/th pop. 15-69		0.1	125 ○
7.3.2 Country-code TLDs/th pop. 15-69		0.0	125 ○
7.3.3 GitHub commit pushes received/mn pop. 15-69		0.0	129 ○
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/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 Burkina Faso.

Missing data for Burkina Faso

Code	Indicator name	Economy year	Model year	Source
2.1.4	PISA scales in reading, maths and science	n/a	2018	OECD, PISA
2.3.1	Researchers, FTE/mn pop.	n/a	2020	UNESCO Institute for Statistics
4.2.1	Market capitalization, % GDP	n/a	2020	World Federation of Exchanges
4.2.2	Venture capital investors, deals/bn PPP\$ GDP	n/a	2021	Refinitiv
4.3.2	Domestic industry diversification	n/a	2019	United Nations Industrial Development Organization
5.1.2	Firms offering formal training, %	n/a	2019	World Bank Enterprise Surveys
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
5.2.5	Patent families/bn PPP\$ GDP	n/a	2018	World Intellectual Property Organization
5.3.5	Research talent, % in businesses	n/a	2020	UNESCO Institute for Statistics
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
7.3.4	Mobile app creation/bn PPP\$ GDP	n/a	2021	data.ia

Outdated data for Burkina Faso

Code	Indicator name	Economy year	Model year	Source
1.3.1	Policies for doing business	2019	2021	World Economic Forum, Executive Opinion Survey (EOS)
1.3.2	Entrepreneurship policies and culture	2020	2021	Global Entrepreneurship Monitor
2.1.2	Government funding/pupil, secondary, % GDP/cap	2016	2018	UNESCO Institute for Statistics
3.2.1	Electricity output, GWh/mn pop.	2019	2020	International Energy Agency
4.1.1	Finance for startups and scaleups	2020	2021	Global Entrepreneurship Monitor
5.1.1	Knowledge-intensive employment, %	2018	2021	International Labour Organization

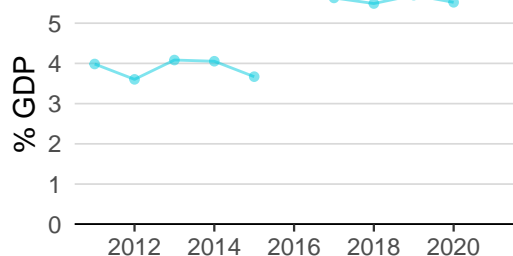


Code	Indicator name	Economy year	Model year	Source
5.1.5	Females employed w/advanced degrees, %	2018	2021	International Labour Organization
5.2.1	University-industry R&D collaboration	2019	2021	World Economic Forum, Executive Opinion Survey (EOS)
5.2.2	State of cluster development and depth	2019	2021	World Economic Forum, Executive Opinion Survey (EOS)
5.2.3	GERD financed by abroad, % GDP	2017	2019	UNESCO Institute for Statistics
5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP	2020	2021	Refinitiv
5.3.1	Intellectual property payments, % total trade	2019	2020	World Trade Organization and United Nations Conference on Trade and Development
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
6.2.2	New businesses/th pop. 15–64	2018	2020	World Bank, Entrepreneurship Database
6.3.1	Intellectual property receipts, % total trade	2019	2020	World Trade Organization and United Nations Conference on Trade and Development
6.3.4	ICT services exports, % total trade	2019	2020	World Trade Organization and United Nations Conference on Trade and Development

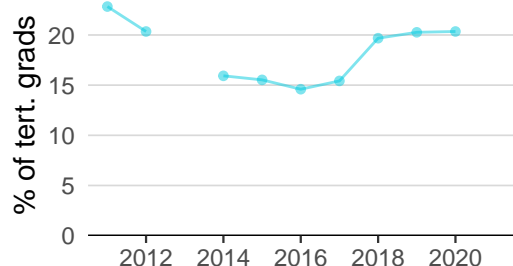
BURKINA FASO'S INNOVATION SYSTEM

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

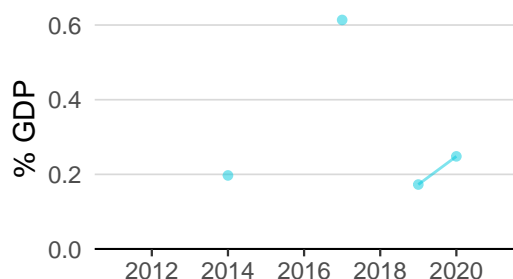
Innovation inputs



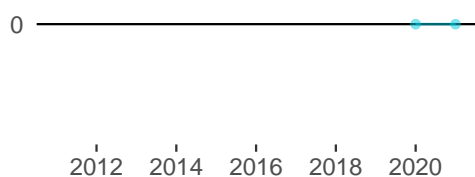
2.1.1 Expenditure on education was equal to 5.5% GDP in 2020—down by 3 percentage points from the year prior—and equivalent to an indicator rank of 25.



2.2.2 Graduates in science and engineering was equal to 20.3% of tert. grads in 2020—effectively unchanged from the year prior—and equivalent to an indicator rank of 66.



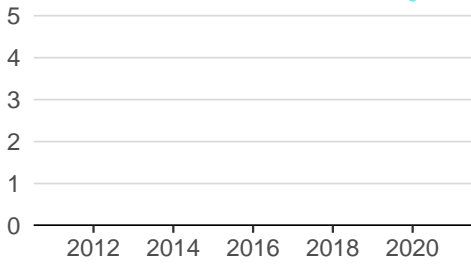
2.3.2 Gross expenditure on R&D was equal to 0.2% GDP in 2020—up by 44 percentage points from the year prior—and equivalent to an indicator rank of 84.



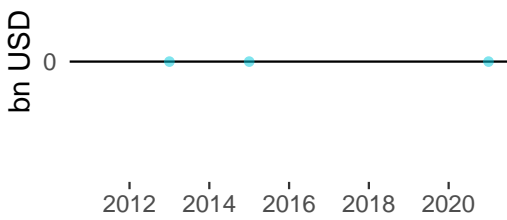
2.3.4 QS university ranking was equal to 0.0 in 2021—effectively unchanged from the year prior—and equivalent to an indicator rank of 72.



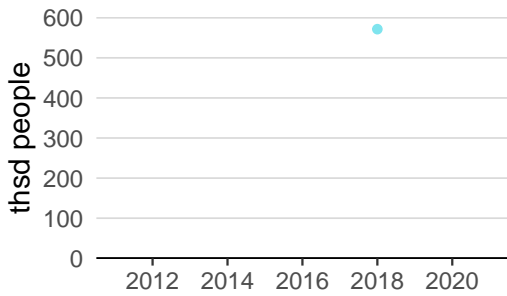
3.1.1 ICT access was equal to 5.5 in 2020 and equivalent to an indicator rank of 117.



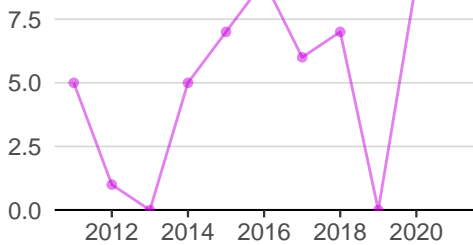
4.2.4 Venture capital received was equal to 0.0 bn USD in 2021 and equivalent to an indicator rank of 101.



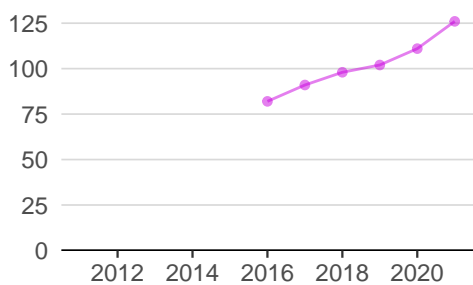
5.1.1 Knowledge-intensive employment was equal to 571.5 thsd people in 2018 and equivalent to an indicator rank of 96.



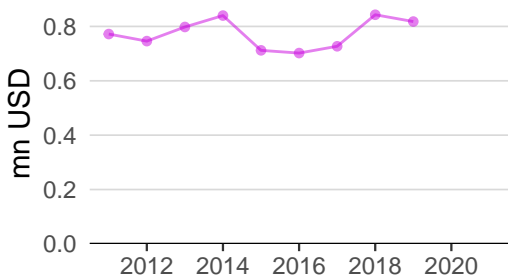
Innovation outputs



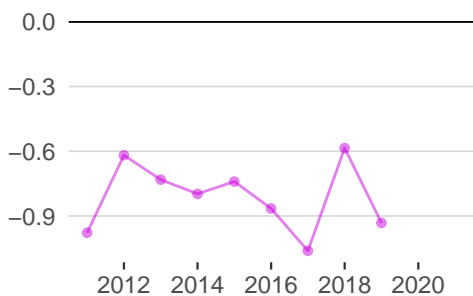
6.1.1 Patents by origin was equal to 9.0 in 2020—up by 10 percentage points from the year prior—and equivalent to an indicator rank of 101.



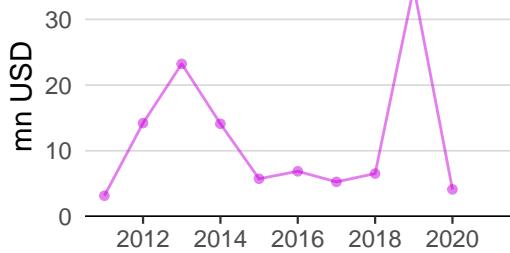
6.1.5 Citable documents H-index was equal to 126.0 in 2021—up by 14 percentage points from the year prior—and equivalent to an indicator rank of 101.



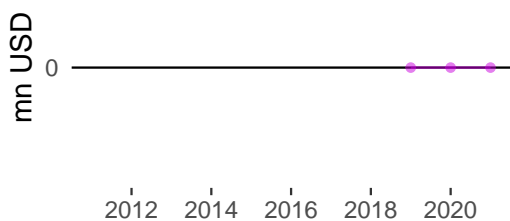
6.3.1 Intellectual property receipts was equal to 0.8 mn USD in 2019—down by 3 percentage points from the year prior—and equivalent to an indicator rank of 87.



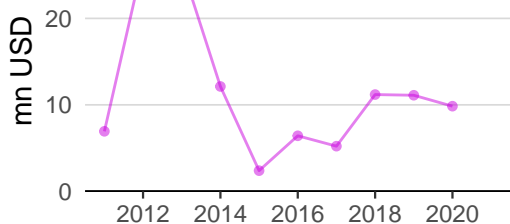
6.3.2 Production and export complexity was equal to -0.9 in 2019—down by 59 percentage points from the year prior—and equivalent to an indicator rank of 104.



6.3.3 High-tech exports was equal to 4.1 mn USD in 2020—down by 88 percentage points from the year prior—and equivalent to an indicator rank of 120.



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 9.8 mn USD in 2020—down by 11 percentage points from the year prior—and equivalent to an indicator rank of 73.



BURKINA FASO'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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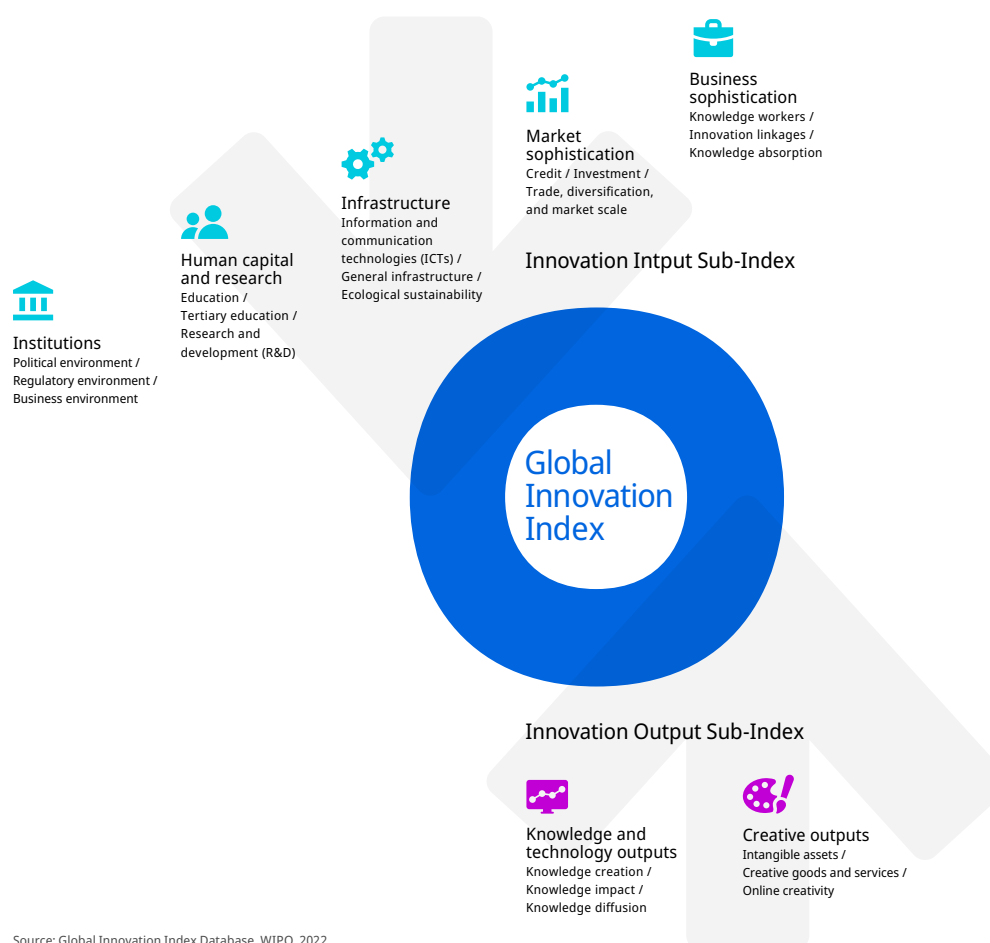
No observations

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.