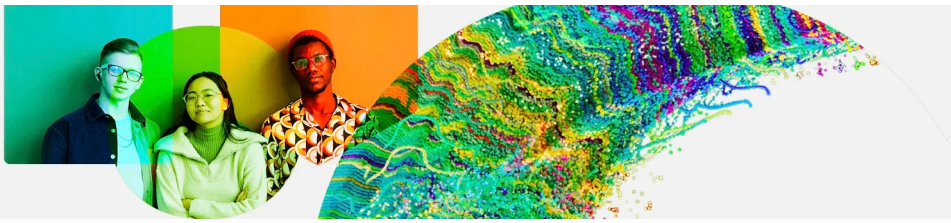
Global Innovation Index 2024



Algeria ranking in the Global Innovation Index 2024

Algeria ranks 115th 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.

Algeria ranks 29th among the 38 lower-middle-income group economies.

Algeria ranks 18th among the 18 economies in Northern Africa and Western Asia.

Algeria GII Ranking (2020-2024)

The table shows the rankings of Algeria 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 Algeria in the GII 2024 is between ranks 106 and 124.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	121st	111st	126th
2021	120th	109th	128th
2022	115th	110th	118th
2023	119th	118th	116th
2024	115th	113rd	115th

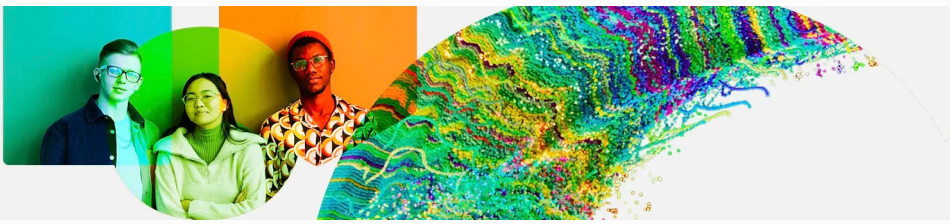
Algeria performs worse in innovation outputs than innovation inputs in 2024.

This year **Algeria ranks 113rd in innovation inputs.** This position is higher than last year.

Algeria ranks 115th in innovation outputs. This position is higher than last year.

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

For Algeria, 6 indicators have improved in the short-term and 3 indicators have worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture capital		International patent filings
		Deal numbers	Deal values	
▲ 0.3% 2022 - 2023	n/a	▲ 200% 2022 - 2023	▼ -99.6% 2022 - 2023	▼ -27.8% 2022 - 2023
▲ 9.2% 2013 - 2023	▲ 22.4% 2005 - 2017	▲ 11.6% 2013 - 2023	▼ -14.9% 2013 - 2023	▲ 5% 2013 - 2023

Technology adoption

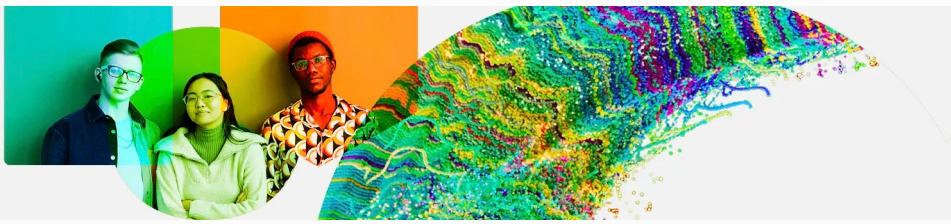
Safe sanitation	Connectivity		Robots	Electric vehicles
	Fixed broadband	5G		
▲ 0.1% 2021 - 2022	▲ 10.9% 2021 - 2022	n/a	n/a	n/a
0% 2012 - 2022	▲ 13% 2012 - 2022		n/a	n/a
62.4 per 100 inhabitants in 2022	10.5 per 100 inhabitants in 2022	n/a		n/a

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▲ 0.6% 2022 - 2023	▲ 1% 2021 - 2022	▲ 2.3°C 2023
▲ 0.4% 2013 - 2023	▲ 0.4% 2012 - 2022	n/a
52,068 USD in 2023	77.1 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



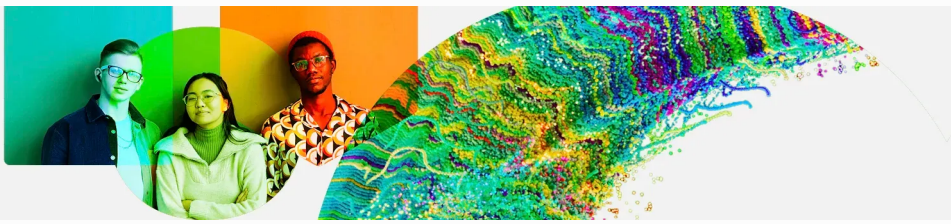
Expected vs. observed innovation performance

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, Algeria's performance is below expectations for its level of development.

> Innovation overperformers relative to their economic development

Global Innovation Index 2024



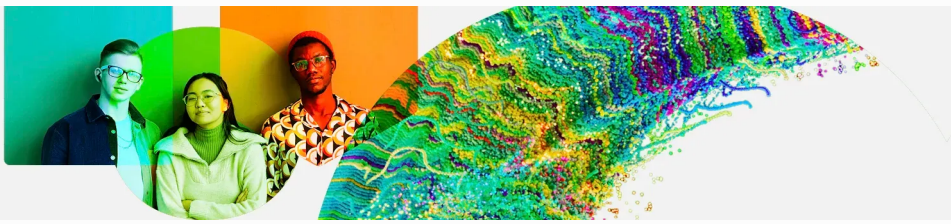
Effectively translating innovation investments into innovation outputs

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.

Algeria produces less innovation outputs relative to its level of innovation investments.

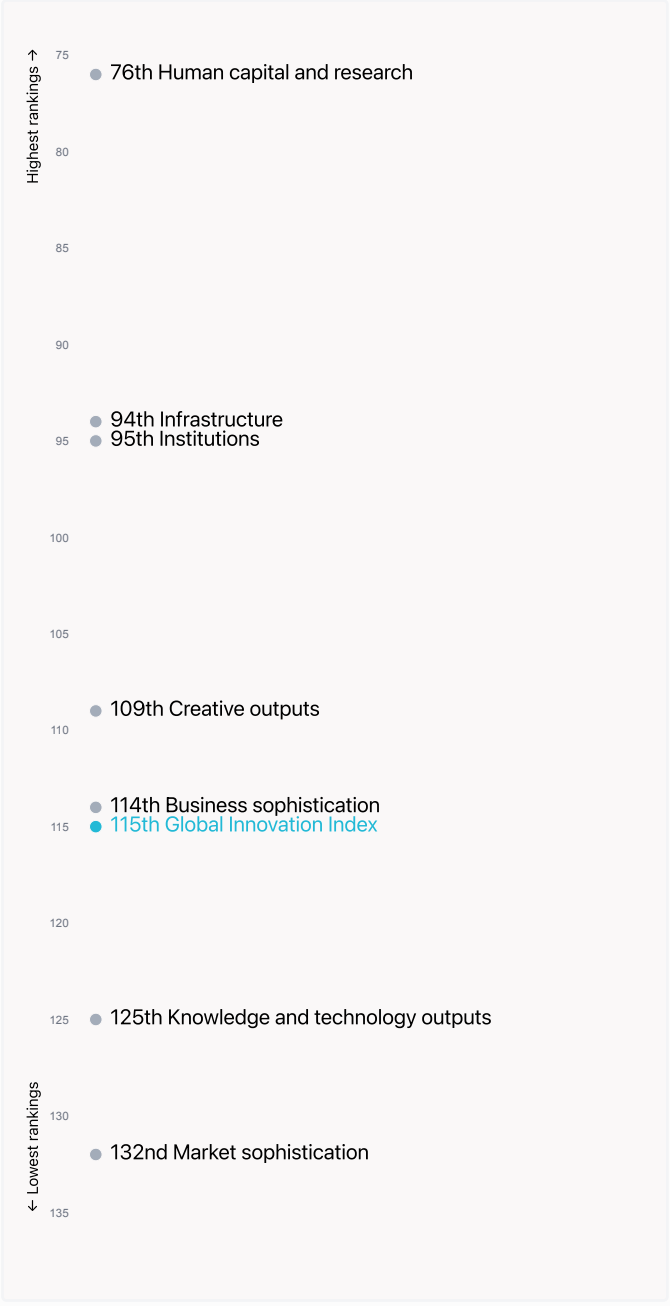
> Relationship between innovation inputs and outputs

Global Innovation Index 2024



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



Highest rankings

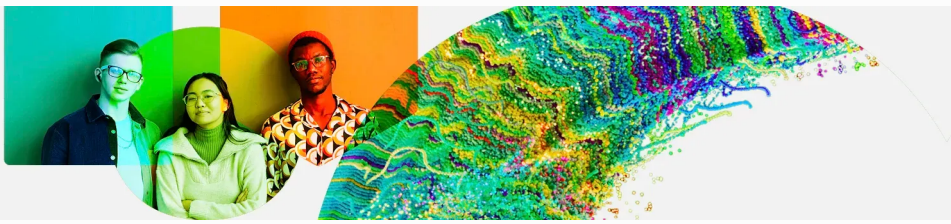
Algeria ranks highest in Human capital and research (76th), Infrastructure (94th), Institutions (95th) and Creative outputs (109th).

Lowest rankings

Algeria ranks lowest in Market sophistication (132nd), Knowledge and technology outputs (125th) and Business sophistication (114th).

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

Global Innovation Index 2024



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

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

Lower-Middle-Income economies

Algeria performs above the lower-middle-income group average in Institutions, Human capital and research, Infrastructure.

Northern Africa And Western Asia

Algeria performs below the regional average in all pillars.

Institutions

- Top 10 | Score: 80.81
- NAWA | Score: 51.34
- Algeria | Score: 34.84
- Lower middle income | Score: 34.0

Human capital and research

- Top 10 | Score: 61.30
- NAWA | Score: 34.27
- Algeria | Score: 28.06
- Lower middle income | Score: 22.1

Infrastructure

- Top 10 | Score: 58.57
- NAWA | Score: 39.94
- Algeria | Score: 29.88
- Lower middle income | Score: 29.8

Market sophistication

- Top 10 | Score: 62.12
- NAWA | Score: 33.58
- Lower middle income | Score: 25.9
- Algeria | Score: 5.16

Business sophistication

- Top 10 | Score: 63.64
- NAWA | Score: 27.20
- Lower middle income | Score: 20.8
- Algeria | Score: 17.96

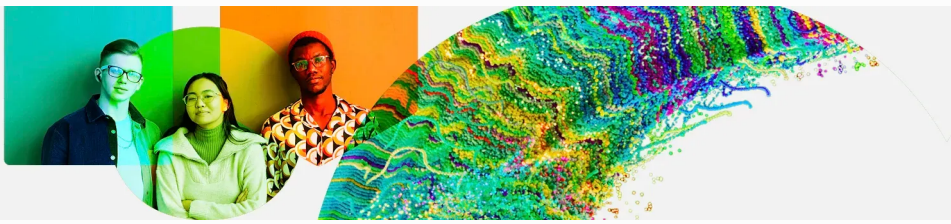
Knowledge and technology outputs

- Top 10 | Score: 57.29
- NAWA | Score: 22.11
- Lower middle income | Score: 15.6
- Algeria | Score: 9.08

Creative outputs

- Top 10 | Score: 56.54
- NAWA | Score: 26.23
- Lower middle income | Score: 15.7
- Algeria | Score: 9.21

Global Innovation Index 2024



Innovation strengths and weaknesses in Algeria

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

Algeria's main innovation strengths are **Expenditure on education, % GDP** (rank 10), **Gross capital formation, % GDP** (rank 10) and **Graduates in science and engineering, %** (rank 20).

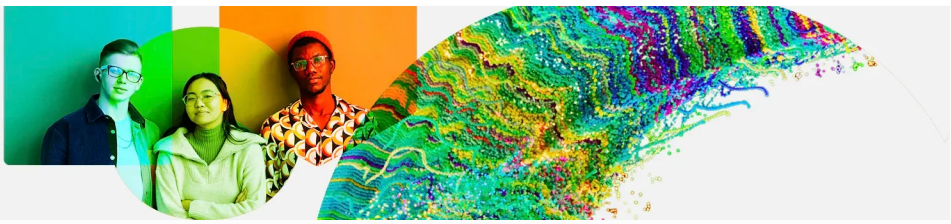
Strengths

Rank	Code	Indicator name
10	2.1.1	Expenditure on education, % GDP
10	3.2.3	Gross capital formation, % GDP
20	2.2.2	Graduates in science and engineering, %
35	5.3.2	High-tech imports, % total trade
41	4.3.3	Domestic market scale, bn PPP$
44	2.1.3	School life expectancy, years
46	7.1.4	Industrial designs by origin/bn PPP$ GDP
47	5.2.2	University-industry R&D collaboration†
50	5.2.3	State of cluster development†
65	6.1.1	Patents by origin/bn PPP$ GDP

Weaknesses

Rank	Code	Indicator name
133	4.3.1	Applied tariff rate, weighted avg., %
132	6.2.3	Software spending, % GDP
131	6.3.3	High-tech exports, % total trade
108	4.2.3	VC recipients, deals/bn PPP$ GDP
85	4.2.1	Market capitalization, % GDP
75	7.1.3	Global brand value, top 5,000, % GDP
75	2.3.4	QS university ranking, top 3*
49	6.2.2	Unicorn valuation, % GDP
41	2.3.3	Global corporate R&D investors, top 3, mn USD

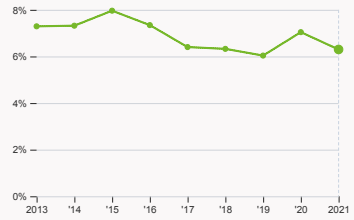
Global Innovation Index 2024



Algeria's innovation system

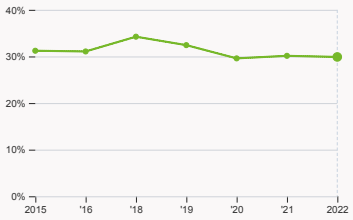
As far as practicable, the plots below present unscaled indicator data.

Innovation inputs in Algeria



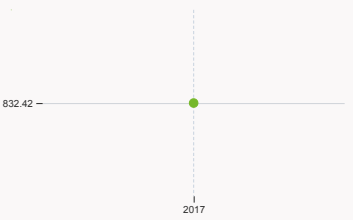
2.1.1 **Expenditure on education**

was equal to 6.3 % GDP in 2021, down by 0.74 percentage points from the year prior – and equivalent to an indicator rank of 10.



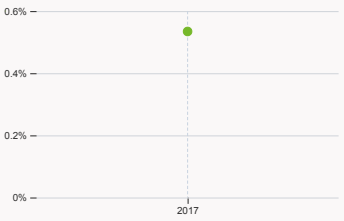
2.2.2 **Graduates in science and engineering**

was equal to 29.89 % of total graduates in 2022, down by 0.24 percentage points from the year prior – and equivalent to an indicator rank of 20.



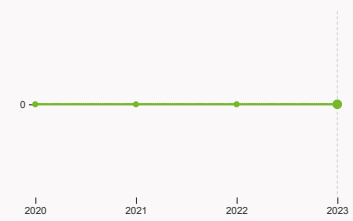
2.3.1 **Researchers**

was equal to 832.42 FTE per million population in 2017 – and equivalent to an indicator rank of 58.



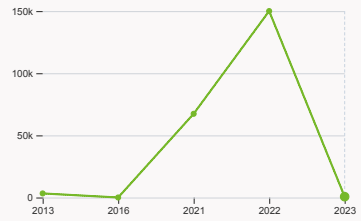
2.3.2 **Gross expenditure on R&D**

was equal to 0.53 % GDP in 2017 – and equivalent to an indicator rank of 58.



2.3.4 **QS university ranking**

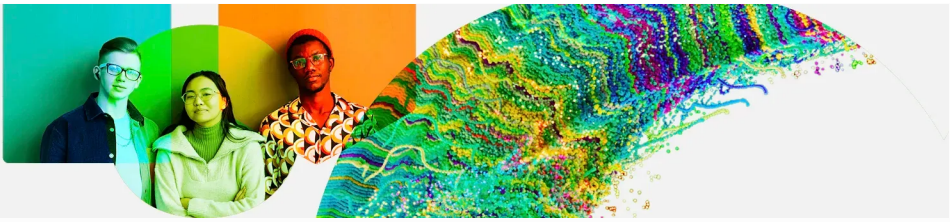
was equal to an average score of 0 for the top three universities in 2023 with no change from the year prior – and equivalent to an indicator rank of 75.

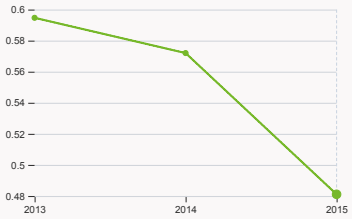


4.2.4 **VC received, value**

was equal to 650 USD in 2023, down by 99.57% from the year prior – and equivalent to an indicator rank of 66.

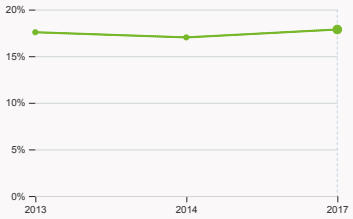
Global Innovation Index 2024





4.3.2 Domestic industry diversification

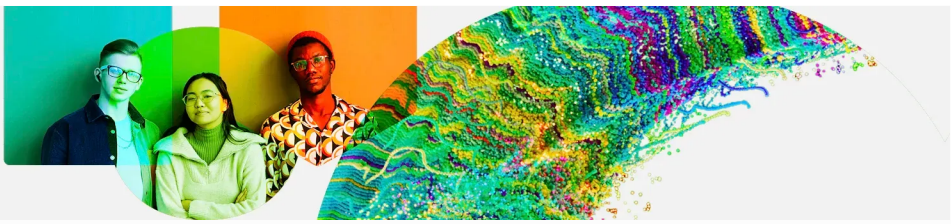
was equal to an index score of 0.48 in 2015, down by 15.9% from the year prior – and equivalent to an indicator rank of 108.



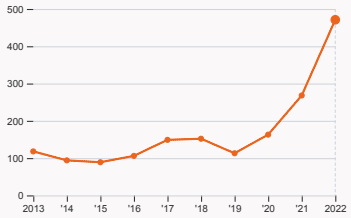
5.1.1 Knowledge-intensive employment

was equal to 17.86 % in 2017, up by 0.85 percentage points from the year prior – and equivalent to an indicator rank of 86.

Global Innovation Index 2024

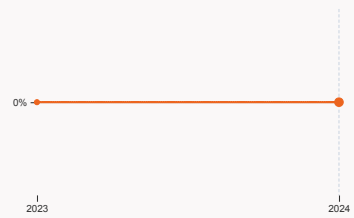


Innovation outputs in Algeria



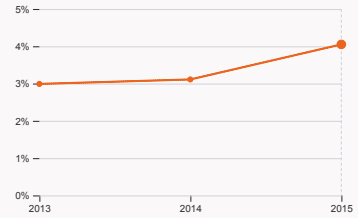
6.1.1 Patents by origin

was equal to 471 patents in 2022, up by 75.75% from the year prior – and equivalent to an indicator rank of 65.



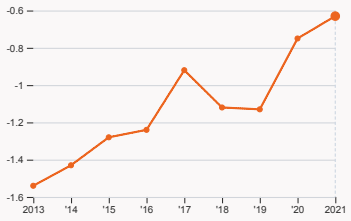
6.2.2 Unicorn valuation

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



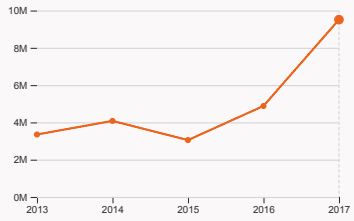
6.2.4 High-tech manufacturing

was equal to 4.05 % of total manufacturing output in 2015, up by 0.94 percentage points from the year prior – and equivalent to an indicator rank of 101.



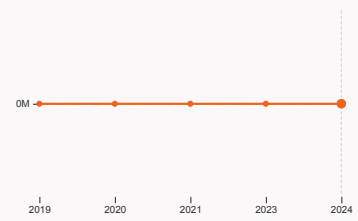
6.3.2 Production and export complexity

was equal to a score of -0.63 in 2021, up by 16% from the year prior – and equivalent to an indicator rank of 94.



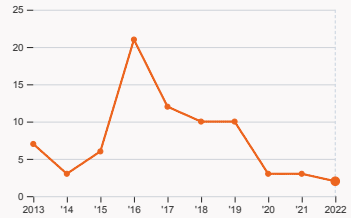
6.3.3 High-tech exports

was equal to 9.51 million USD in 2017, up by 94.88% from the year prior – and equivalent to an indicator rank of 131.



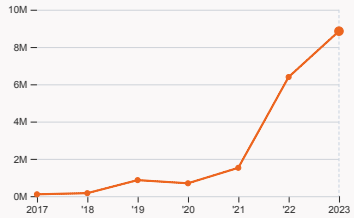
7.1.3 Global brand value

was equal to 0 million USD for the brands in the top 5,000 in 2024 with no change from the year prior – and equivalent to an indicator rank of 75.



7.2.2 National feature films

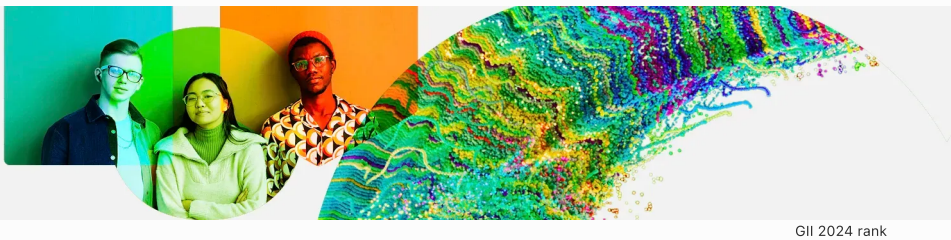
was equal to 2 films in 2022, down by 33.33% from the year prior – and equivalent to an indicator rank of 84.



7.3.3 Mobile app creation

was equal to 8.85 million global downloads of mobile apps in 2023, up by 38.5% from the year prior – and equivalent to an indicator rank of 103.

Global Innovation Index 2024



Algeria

GII 2024 rank **115**

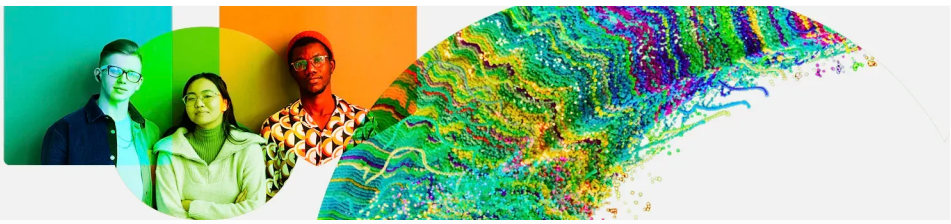
Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
115	113	Lower middle	NAWA	46.2	629	13,681.6

	Score / Value	Rank	
Institutions	**34.8**	**95**	
1.1 Institutional environment	**38.6**	**99**	
1.1.1 Operational stability for businesses*	46.7	100	
1.1.2 Government effectiveness*	30.6	100	
1.2 Regulatory environment	**16.9**	**121**	
1.2.1 Regulatory quality*	13.9	124	
1.2.2 Rule of law*	20	110	
1.3 Business environment	**49**	**[61]**	
1.3.1 Policy stability for doing business†	49	66	
1.3.2 Entrepreneurship policies and culture†	n/a	n/a	
Human capital and research	**28.1**	**76**	
2.1 Education	**46**	**[78]**	
2.1.1 Expenditure on education, % GDP	6.3	10	●◆
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a	
2.1.3 School life expectancy, years	15.5	44	●◆
2.1.4 PISA scales in reading, maths and science	361.7	78	
2.1.5 Pupil–teacher ratio, secondary	n/a	n/a	
2.2 Tertiary education	**33.9**	**65**	
2.2.1 Tertiary enrolment, % gross	53.4	67	◆
2.2.2 Graduates in science and engineering, %	29.9	20	●◆
2.2.3 Tertiary inbound mobility, %	0.5	99	
2.3 Research and development (R&D)	**4.2**	**79**	
2.3.1 Researchers, FTE/mn pop.	832.4	58	
2.3.2 Gross expenditure on R&D, % GDP	0.5	58	
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	**29.9**	**94**	
3.1 Information and communication technologies (ICTs)	**52.8**	**99**	
3.1.1 ICT access*	84	80	◆
3.1.2 ICT use*	75.4	73	
3.1.3 Government's online service*	30.8	121	
3.1.4 E-participation*	20.9	123	
3.2 General infrastructure	**31.3**	**66**	
3.2.1 Electricity output, GWh/mn pop.	1,932.9	81	
3.2.2 Logistics performance*	18.2	89	
3.2.3 Gross capital formation, % GDP	36	10	●◆
3.3 Ecological sustainability	**5.6**	**128**	◇
3.3.1 GDP/unit of energy use	7.8	95	
3.3.2 Low-carbon energy use, %	0.3	124	◇
3.3.3 ISO 14001 environment/bn PPP$ GDP	0.3	108	
Market sophistication	**5.2**	**132**	○◇
4.1 Credit	**5**	**[126]**	
4.1.1 Finance for startups and scaleups†	n/a	n/a	
4.1.2 Domestic credit to private sector, % GDP	21.1	115	
4.1.3 Loans from microfinance institutions, % GDP	n/a	n/a	
4.2 Investment	**1.7**	**108**	
4.2.1 Market capitalization, % GDP	0.2	85	○◇
4.2.2 Venture capital (VC) investors, deals/bn PPP$ GDP	n/a	n/a	
4.2.3 VC recipients, deals/bn PPP$ GDP	0.003	108	○
4.2.4 VC received, value, % GDP	0.0004	66	
4.3 Trade, diversification and market scale	**8.8**	**132**	○◇
4.3.1 Applied tariff rate, weighted avg., %	12.7	133	○◇
4.3.2 Domestic industry diversification	14.2	108	
4.3.3 Domestic market scale, bn PPP$	629	41	●◆

	Score / Value	Rank	
Business sophistication	**18**	**114**	
5.1 Knowledge workers	**15**	**113**	
5.1.1 Knowledge-intensive employment, %	17.9	86	
5.1.2 Firms offering formal training, %	n/a	n/a	
5.1.3 GERD performed by business, % GDP	0.04	77	
5.1.4 GERD financed by business, %	6.7	82	
5.1.5 Females employed w/advanced degrees, %	8.1	83	
5.2 Innovation linkages	**23**	**65**	●◆
5.2.1 Public Research-Industry co-publications, %	0.6	115	
5.2.2 University-industry R&D collaboration†	54.7	47	●◆
5.2.3 State of cluster development†	55	50	●◆
5.2.4 Joint venture/strategic alliance deals/bn PPP$ GDP	0.002	121	◇
5.2.5 Patent families/bn PPP$ GDP	0.004	100	
5.3 Knowledge absorption	**15.8**	**120**	
5.3.1 Intellectual property payments, % total trade	0.4	82	
5.3.2 High-tech imports, % total trade	10.4	35	●◆
5.3.3 ICT services imports, % total trade	0.3	119	
5.3.4 FDI net inflows, % GDP	0.5	107	
5.3.5 Research talent, % in businesses	0.5	83	◇
Knowledge and technology outputs	**9.1**	**125**	
6.1 Knowledge creation	**10.2**	**82**	
6.1.1 Patents by origin/bn PPP$ GDP	0.8	65	●◆
6.1.2 PCT patents by origin/bn PPP$ GDP	0.02	85	
6.1.3 Utility models by origin/bn PPP$ GDP	-	-	
6.1.4 Scientific and technical articles/bn PPP$ GDP	8.1	83	
6.1.5 Citable documents H-index	10.2	74	
6.2 Knowledge impact	**10.9**	**128**	◇
6.2.1 Labor productivity growth, %	-0.6	111	
6.2.2 Unicorn valuation, % GDP	0	49	○◇
6.2.3 Software spending, % GDP	0.009	132	○◇
6.2.4 High-tech manufacturing, %	4.1	101	
6.3 Knowledge diffusion	**6.2**	**112**	
6.3.1 Intellectual property receipts, % total trade	0.002	106	
6.3.2 Production and export complexity	27.3	94	
6.3.3 High-tech exports, % total trade	0.02	131	○
6.3.4 ICT services exports, % total trade	0.2	126	
6.3.5 ISO 9001 quality/bn PPP$ GDP	1.1	112	
Creative outputs	**9.2**	**109**	
7.1 Intangible assets	**9.2**	**100**	
7.1.1 Intangible asset intensity, top 15, %	n/a	n/a	
7.1.2 Trademarks by origin/bn PPP$ GDP	20	87	
7.1.3 Global brand value, top 5,000, % GDP	0	75	○◇
7.1.4 Industrial designs by origin/bn PPP$ GDP	1.5	46	●◆
7.2 Creative goods and services	**0.6**	**124**	
7.2.1 Cultural and creative services exports, % total trade	0.01	105	
7.2.2 National feature films/mn pop. 15–69	0.07	84	
7.2.3 Entertainment and media market/th pop. 15–69	1.7	53	
7.2.4 Creative goods exports, % total trade	0.01	125	
7.3 Online creativity	**17.7**	**106**	
7.3.1 Top-level domains (TLDs)/th pop. 15–69	0.3	117	
7.3.2 GitHub commits/mn pop. 15–69	1.4	110	
7.3.3 Mobile app creation/bn PPP$ GDP	51.5	103	

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.

Global Innovation Index 2024



Data availability

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

Algeria has missing data for nine indicators and outdated data for seventeen indicators.

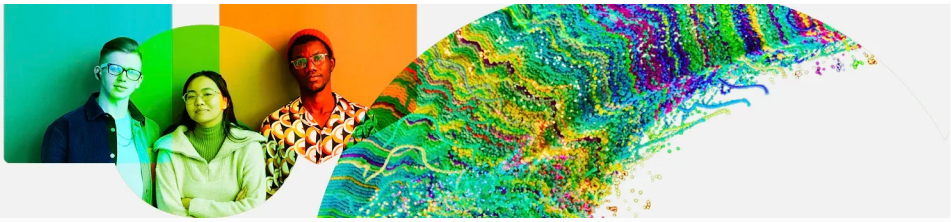
Missing data for Algeria

Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture†	n/a	2023	Global Entrepreneurship Monitor
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2020	UNESCO Institute for Statistics
2.1.5	Pupil–teacher ratio, secondary	n/a	2022	UNESCO Institute for Statistics
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)
4.2.2	Venture capital (VC) investors, deals/bn PPP$ GDP	n/a	2023	LSEG Data & Analytics; International Monetary Fund
5.1.2	Firms offering formal training, %	n/a	2023	World Bank Enterprise Surveys
6.1.3	Utility models by origin/bn PPP$ GDP	n/a	2022	World Intellectual Property Organization; International Monetary Fund
7.1.1	Intangible asset intensity, top 15, %	n/a	2023	Brand Finance

Outdated data for Algeria

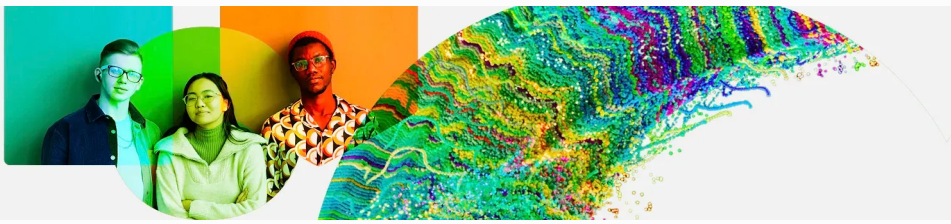
Code	Indicator name	Economy Year	Model Year	Source
2.1.1	Expenditure on education, % GDP	2021	2022	UNESCO Institute for Statistics
2.1.4	PISA scales in reading, maths and science	2015	2022	OECD, PISA
2.3.1	Researchers, FTE/mn pop.	2017	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	2017	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.1	Electricity output, GWh/mn pop.	2021	2022	International Energy Agency
4.2.1	Market capitalization, % GDP	2018	2022	World Federation of Exchanges; World Bank

Global Innovation Index 2024



Code	Indicator name	Economy Year	Model Year	Source
4.3.1	Applied tariff rate, weighted avg., %	2017	2022	World Trade Organization
4.3.2	Domestic industry diversification	2015	2021	United Nations Industrial Development Organization (UNIDO), Industrial Statistics Database (INDSTAT) Rev.3 and 4
5.1.1	Knowledge-intensive employment, %	2017	2022	International Labour Organization
5.1.3	GERD performed by business, % GDP	2017	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	2017	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.5	Females employed w/advanced degrees, %	2017	2023	International Labour Organization
5.3.2	High-tech imports, % total trade	2017	2022	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development
5.3.5	Research talent, % in businesses	2017	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
6.2.4	High-tech manufacturing, %	2015	2021	United Nations Industrial Development Organization
6.3.3	High-tech exports, % total trade	2017	2022	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development; Trade Data Monitor.
7.2.4	Creative goods exports, % total trade	2017	2022	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development

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.