Global Innovation Index 2021

SRI LANKA

95th Sri Lanka ranks 95th 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 Sri Lanka 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 Sri Lanka in the GII 2021 is between ranks 84 and 97.

Rankings for Sri Lanka (2019–2021)

	GII	Innovation inputs	Innovation outputs
2021	95	103	85
2020	101	107	83
2019	89	94	77

- Sri Lanka performs better in innovation outputs than innovation inputs in 2021.
- This year Sri Lanka ranks 103rd in innovation inputs, higher than last year but lower than 2019.
- As for innovation outputs, Sri Lanka ranks 85th. This position is lower than both 2020 and 2019.

14th Sri Lanka ranks 14th among the 34 lower middle-income group economies.

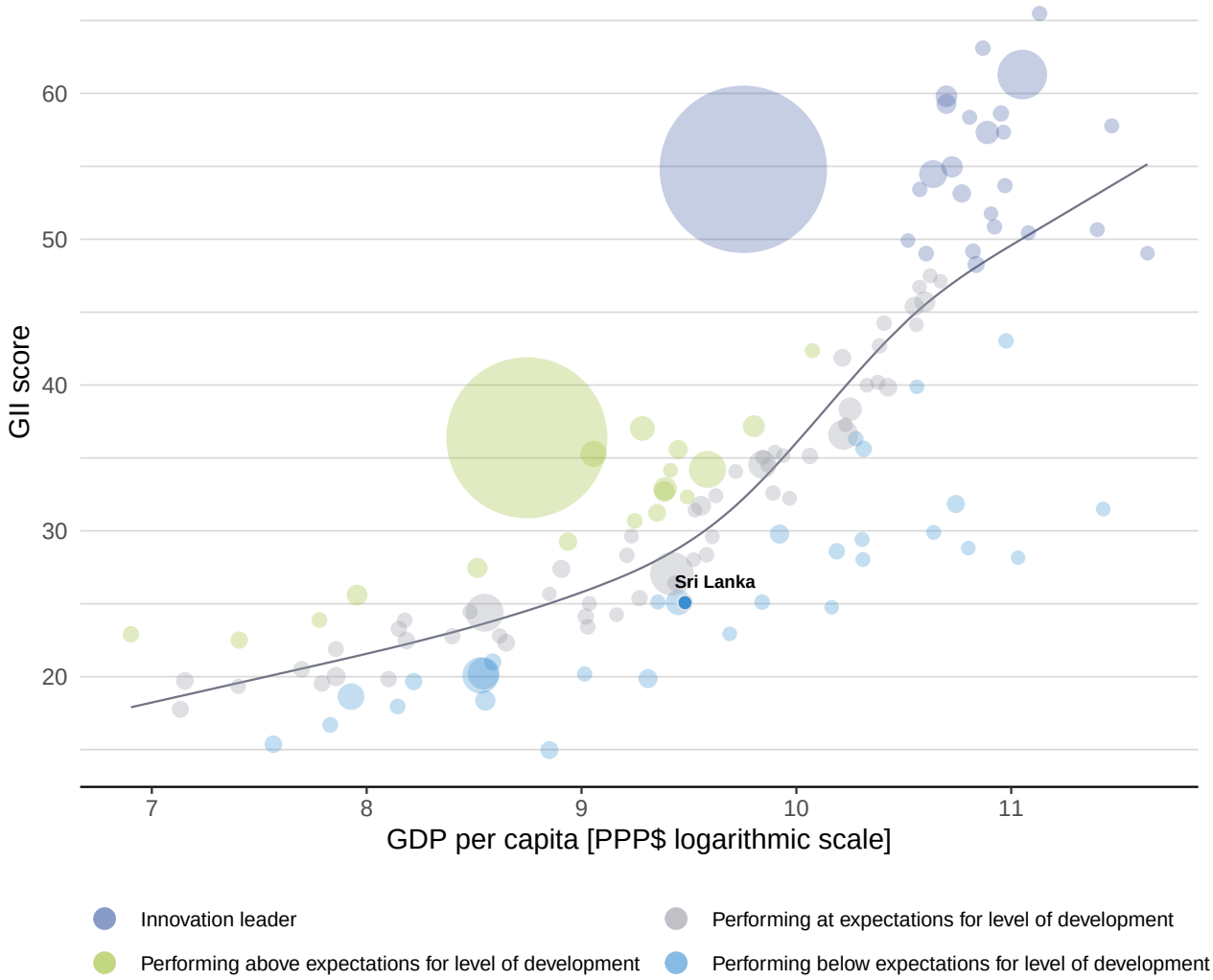
5th Sri Lanka ranks 5th among the 10 economies in Central and Southern Asia.

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

The positive relationship between innovation and development

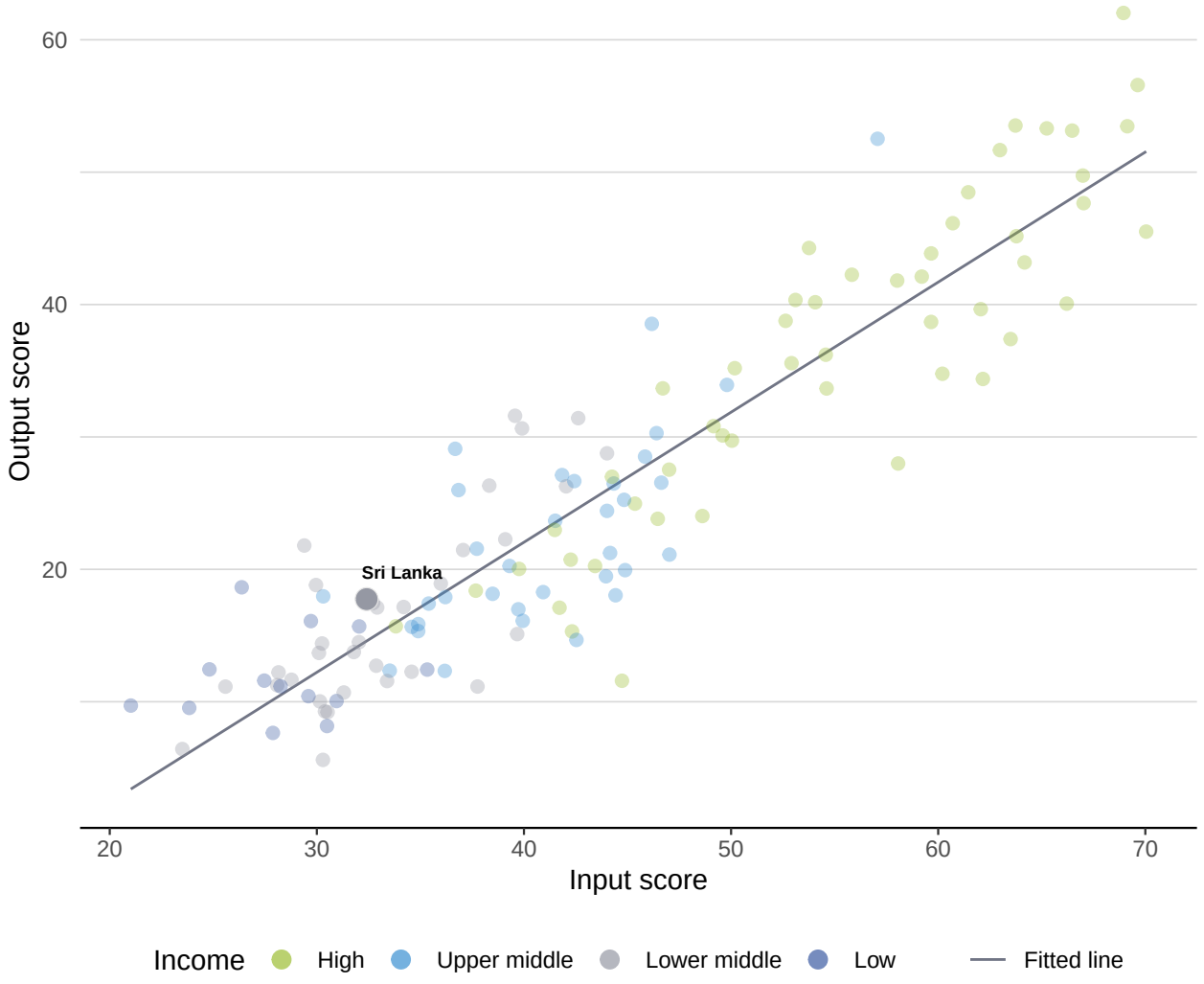


EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

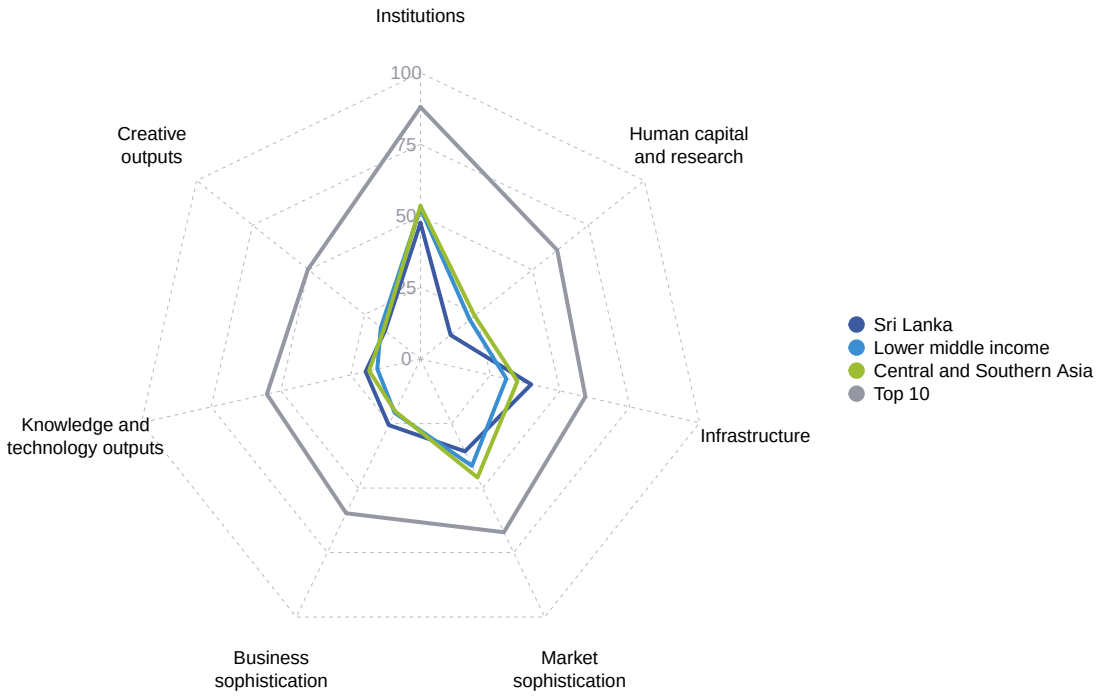
Sri Lanka produces more innovation outputs relative to its level of innovation investments.

Innovation input to output performance



BENCHMARKING AGAINST OTHER LOWER MIDDLE-INCOME GROUP ECONOMIES AND CENTRAL AND SOUTHERN ASIA

The seven GII pillar scores for Sri Lanka



Lower middle-income group economies

Sri Lanka performs above the lower middle-income group average in three pillars, namely: Infrastructure; Business sophistication; and, Knowledge and technology outputs.

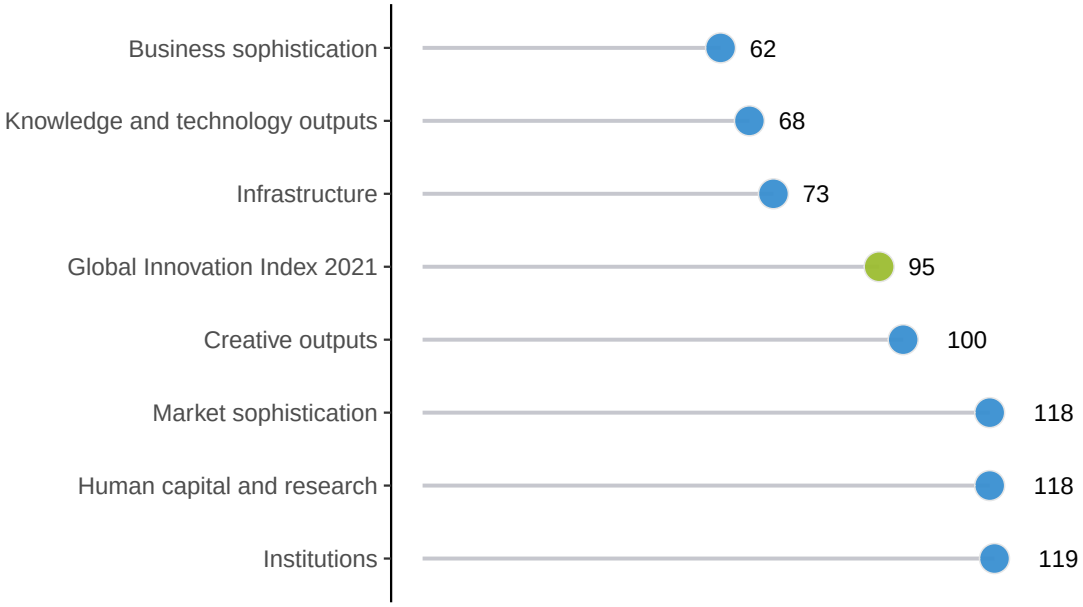
Central and Southern Asia

Sri Lanka performs above the regional average in three pillars, namely: Infrastructure; Business sophistication; and, Knowledge and technology outputs.

OVERVIEW OF RANKINGS IN THE SEVEN GII 2021 AREAS

Sri Lanka performs best in Business sophistication and its weakest performance is in Institutions.

The seven GII pillar ranks for Sri Lanka



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 Sri Lanka in the GII 2021.

Strengths and weaknesses for Sri Lanka

Strengths			Weaknesses		
Code	**Indicator name**	**Rank**	**Code**	**Indicator name**	**Rank**
3.3	Ecological sustainability	37	1.2	Regulatory environment	130
3.3.1	GDP/unit of energy use	4	1.2.3	Cost of redudancy dismissal	130
4.2.1	Ease of protecting minority investors	27	2.1	Education	114
5.2.1	University-industry R&D collaboration	44	2.1.1	Expenditure on education, % GDP	112
5.2.2	State of cluster development and depth	44	2.1.2	Government funding/pupil, secondary, % GDP/cap	99
5.2.4	Joint venture/strategic alliance deals/bn PPP$ GDP	28	2.2.3	Tertiary inbound mobility, %	97
5.3.3	ICT services imports, % total trade	26	2.3.3	Global corporate R&D investors, top 3, mn US$	41
6.2.1	Labor productivity growth, %	46	2.3.4	QS university ranking, top 3	74
6.2.3	Software spending, % GDP	22	4.1	Credit	116
6.3	Knowledge diffusion	46	4.1.1	Ease of getting credit	113
6.3.4	ICT services exports, % total trade	16	4.2.3	Venture capital investors, deals/bn PPP$ GDP	78
7.2.4	Printing and other media, % manufacturing	11	4.3.1	Applied tariff rate, weighted avg., %	127
			6.1.4	Scientific and technical articles/bn PPP$ GDP	114

Sri Lanka

GII 2021 rank
95

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$	GII 2020 rank
85	103	Lower middle	CSA	21.4	287.7	13,114	101

		Score/ Value	Rank	
Institutions		**47.5**	**119**	○
1.1	**Political environment**	**54.7**	**79**	
1.1.1	Political and operational stability*	67.9	71	
1.1.2	Government effectiveness*	48.1	81	
1.2	**Regulatory environment**	**21.3**	**130**	○ ◇
1.2.1	Regulatory quality*	38.7	83	
1.2.2	Rule of law*	46.4	63	◆
1.2.3	Cost of redundancy dismissal	58.5	130	○ ◇
1.3	**Business environment**	**66.6**	**79**	
1.3.1	Ease of starting a business*	88.2	68	
1.3.2	Ease of resolving insolvency*	45.0	85	
Human capital and research		**13.5**	**118**	○ ◇
2.1	**Education**	**29.6**	**114**	○
2.1.1	Expenditure on education, % GDP	2.1	112	○ ◇
2.1.2	Government funding/pupil, secondary, % GDP/cap	6.7	99	○ ◇
2.1.3	School life expectancy, years	14.1	70	◆
2.1.4	PISA scales in reading, maths and science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary	17.5	85	
2.2	**Tertiary education**	**9.9**	**113**	
2.2.1	Tertiary enrolment, % gross	21.1	97	
2.2.2	Graduates in science and engineering, %	n/a	n/a	
2.2.3	Tertiary inbound mobility, %	0.5	97	○
2.3	**Research and development (R&D)**	**0.9**	**106**	
2.3.1	Researchers, FTE/mn pop.	106.4	86	
2.3.2	Gross expenditure on R&D, % GDP	0.1	100	
2.3.3	Global corporate R&D investors, top 3, mn US$	0.0	41	○ ◇
2.3.4	QS university ranking, top 3*	0.0	74	○ ◇
Infrastructure		**39.7**	**73**	◆
3.1	**Information and communication technologies (ICTs)**	**57.4**	**88**	
3.1.1	ICT access*	49.1	92	
3.1.2	ICT use*	37.4	100	
3.1.3	Government's online service*	71.8	63	◆
3.1.4	E-participation*	71.4	66	
3.2	**General infrastructure**	**22.1**	**96**	
3.2.1	Electricity output, GWh/mn pop.	711.5	103	
3.2.2	Logistics performance*	25.6	90	
3.2.3	Gross capital formation, % GDP	24.4	53	
3.3	**Ecological sustainability**	**39.5**	**37**	● ◆
3.3.1	GDP/unit of energy use	23.7	4	● ◆
3.3.2	Environmental performance*	39.0	90	
3.3.3	ISO 14001 environmental certificates/bn PPP$ GDP	1.4	59	◆
Market sophistication		**35.8**	**118**	○
4.1	**Credit**	**25.5**	**116**	○
4.1.1	Ease of getting credit*	40.0	113	○
4.1.2	Domestic credit to private sector, % GDP	49.8	70	
4.1.3	Microfinance gross loans, % GDP	0.5	35	
4.2	**Investment**	**20.7**	**109**	
4.2.1	Ease of protecting minority investors*	72.0	27	● ◆
4.2.2	Market capitalization, % GDP	19.3	60	
4.2.3	Venture capital investors, deals/bn PPP$ GDP	0.0	78	○
4.2.4	Venture capital recipients, deals/bn PPP$ GDP	0.0	71	
4.3	**Trade, diversification, and market scale**	**61.1**	**90**	
4.3.1	Applied tariff rate, weighted avg., %	13.3	127	○ ◇
4.3.2	Domestic industry diversification	84.0	70	
4.3.3	Domestic market scale, bn PPP$	287.7	54	

		Score/ Value	Rank	
Business sophistication		**25.6**	**62**	
5.1	**Knowledge workers**	**23.7**	**87**	
5.1.1	Knowledge-intensive employment, %	23.0	68	
5.1.2	Firms offering formal training, %	18.4	83	
5.1.3	GERD performed by business, % GDP	0.1	73	
5.1.4	GERD financed by business, %	40.3	44	◆
5.1.5	Females employed w/advanced degrees, %	3.2	100	
5.2	**Innovation linkages**	**21.3**	**62**	
5.2.1	University-industry R&D collaboration†	48.7	44	● ◆
5.2.2	State of cluster development and depth†	50.4	44	●
5.2.3	GERD financed by abroad, % GDP	0.0	79	
5.2.4	Joint venture/strategic alliance deals/bn PPP$ GDP	0.1	28	● ◆
5.2.5	Patent families/bn PPP$ GDP	0.0	73	
5.3	**Knowledge absorption**	**31.7**	**53**	◆
5.3.1	Intellectual property payments, % total trade	n/a	n/a	
5.3.2	High-tech imports, % total trade	7.7	64	
5.3.3	ICT services imports, % total trade	2.3	26	● ◆
5.3.4	FDI net inflows, % GDP	1.4	95	
5.3.5	Research talent, % in businesses	20.0	54	
Knowledge and technology outputs		**19.7**	**68**	
6.1	**Knowledge creation**	**7.7**	**90**	
6.1.1	Patents by origin/bn PPP$ GDP	1.2	59	
6.1.2	PCT patents by origin/bn PPP$ GDP	0.1	69	
6.1.3	Utility models by origin/bn PPP$ GDP	n/a	n/a	
6.1.4	Scientific and technical articles/bn PPP$ GDP	4.7	114	○
6.1.5	Citable documents H-index	10.6	72	
6.2	**Knowledge impact**	**26.3**	**79**	
6.2.1	Labor productivity growth, %	1.0	46	●
6.2.2	New businesses/th pop. 15–64	0.7	88	
6.2.3	Software spending, % GDP	0.4	22	● ◆
6.2.4	ISO 9001 quality certificates/bn PPP$ GDP	4.2	62	◆
6.2.5	High-tech manufacturing, %	7.7	95	
6.3	**Knowledge diffusion**	**25.0**	**46**	●
6.3.1	Intellectual property receipts, % total trade	n/a	n/a	
6.3.2	Production and export complexity	35.6	77	
6.3.3	High-tech exports, % total trade	0.9	75	
6.3.4	ICT services exports, % total trade	4.8	16	● ◆
Creative outputs		**15.8**	**100**	
7.1	**Intangible assets**	**21.1**	**97**	
7.1.1	Trademarks by origin/bn PPP$ GDP	22.5	88	
7.1.2	Global brand value, top 5,000, % GDP	15.7	53	
7.1.3	Industrial designs by origin/bn PPP$ GDP	1.6	54	
7.1.4	ICTs and organizational model creation†	47.5	91	
7.2	**Creative goods and services**	**13.9**	**[67]**	
7.2.1	Cultural and creative services exports, % total trade	n/a	n/a	
7.2.2	National feature films/mn pop. 15–69	1.0	85	
7.2.3	Entertainment and media market/th pop. 15–69	n/a	n/a	
7.2.4	Printing and other media, % manufacturing	2.3	11	● ◆
7.2.5	Creative goods exports, % total trade	0.4	67	
7.3	**Online creativity**	**7.4**	**112**	
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.7	101	
7.3.2	Country-code TLDs/th pop. 15–69	0.9	89	
7.3.3	Wikipedia edits/mn pop. 15–69	30.0	104	
7.3.4	Mobile app creation/bn PPP$ GDP	0.7	77	

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 Sri Lanka.

Missing data for Sri Lanka

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)
2.2.2	Graduates in science and engineering, %	n/a	2018	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.3.1	Intellectual property payments, % total trade	n/a	2019	World Trade Organization
6.1.3	Utility models by origin/bn PPP$ GDP	n/a	2019	World Intellectual Property Organization
6.3.1	Intellectual property receipts, % total trade	n/a	2019	World Trade Organization
7.2.1	Cultural and creative services exports, % total trade	n/a	2019	World Trade Organization
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2020	PwC

Outdated data for Sri Lanka

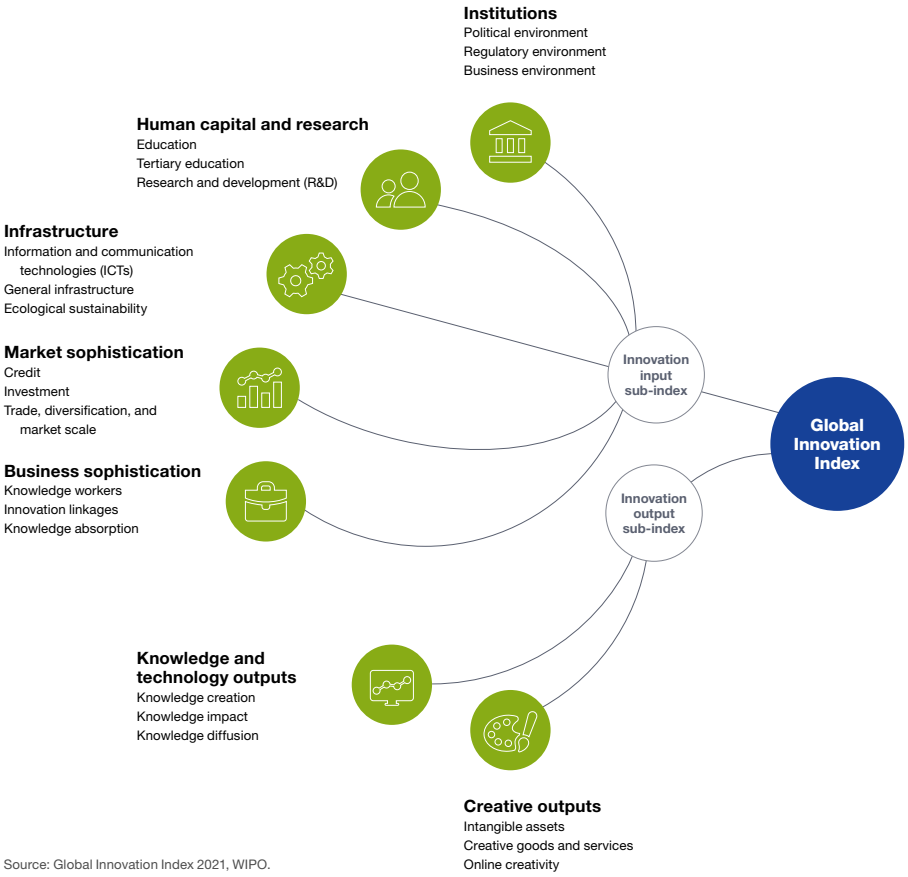
Code	Indicator name	Economy year	Model year	Source
2.1.5	Pupil-teacher ratio, secondary	2018	2019	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	2017	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
2.3.2	Gross expenditure on R&D, % GDP	2017	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
4.2.4	Venture capital recipients, deals/bn PPP$ GDP	2018	2020	Refinitiv Eikon
5.1.1	Knowledge-intensive employment, %	2018	2019	International Labour Organization
5.1.2	Firms offering formal training, %	2011	2019	World Bank

Code	Indicator name	Economy year	Model year	Source
5.1.3	GERD performed by business, % GDP	2017	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.1.4	GERD financed by business, %	2017	2018	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.1.5	Females employed w/advanced degrees, %	2018	2019	International Labour Organization
5.2.3	GERD financed by abroad, % GDP	2017	2018	UNESCO Institute for Statistics
5.3.2	High-tech imports, % total trade	2017	2019	United Nations, COMTRADE
5.3.5	Research talent, % in businesses	2017	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
6.3.3	High-tech exports, % total trade	2017	2019	United Nations, COMTRADE
7.2.2	National feature films/mn pop. 15–69	2013	2017	UNESCO Institute for Statistics
7.2.4	Printing and other media, % manufacturing	2017	2018	United Nations Industrial Development Organization
7.2.5	Creative goods exports, % total trade	2017	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.



Source: Global Innovation Index 2021, WIPO.

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.