Global Innovation Index 2023

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.

Sri Lanka ranking in the Global Innovation Index 2023

> Sri Lanka ranks 90th among the 132 economies featured in the GII 2023.

> Sri Lanka ranks 13th among the 37 lower-middle-income group economies.

> Sri Lanka ranks 6th among the 10 economies in Central and Southern Asia.

> Sri Lanka GII Ranking (2020-2023)

The table shows the rankings of Sri Lanka 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 Sri Lanka in the GII 2023 is between ranks 85 and 98.

<table>
<thead>
<tr>
<th>Year</th>
<th>GII Position</th>
<th>Innovation Inputs</th>
<th>Innovation Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>101st</td>
<td>107th</td>
<td>83rd</td>
</tr>
<tr>
<td>2021</td>
<td>95th</td>
<td>103rd</td>
<td>85th</td>
</tr>
<tr>
<td>2022</td>
<td>85th</td>
<td>102nd</td>
<td>68th</td>
</tr>
<tr>
<td>2023</td>
<td>90th</td>
<td>103rd</td>
<td>79th</td>
</tr>
</tbody>
</table>

Sri Lanka performs better in innovation outputs than innovation inputs in 2023.

This year Sri Lanka ranks 103rd in innovation inputs. This position is lower than last year.

Sri Lanka ranks 79th in innovation outputs. This position is lower than last year.
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 at expectations for its level of development.

Innovation overperformers relative to their economic development

GII Score

→GDP per capita, PPP logarithmic scale (thousands of $)
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.

Relationship between innovation inputs and outputs
→ Overview of Sri Lanka’s rankings in the seven areas of the GII in 2023

The chart shows the ranking for each of the seven areas that the GII comprises. The strongest areas for Sri Lanka are those that rank above the GII (shown in blue) and the weakest are those that rank below.

> Highest rankings

Sri Lanka ranks highest in Business sophistication, Knowledge and technology outputs (71st), Infrastructure (82nd) and Creative outputs (83rd).

> Lowest rankings

Sri Lanka ranks lowest in Institutions (124th), Human capital and research (110th) and Market sophistication (106th).

* Business sophistication, Knowledge and technology outputs

The full WIPO Intellectual Property Statistics profile for Sri Lanka can be found on this link.
Benchmark of Sri Lanka against other country groupings for each of the seven areas of the GII Index

The charts show the relative position of Sri Lanka (blue bar) against other country groupings (grey bars), for each of the seven areas of the GII Index.

**Lower-Middle-Income economies**
Sri Lanka performs below the lower-middle-income group average in Market sophistication, Human capital and research, Institutions.

**Central And Southern Asia**
Sri Lanka performs below the regional average in Market sophistication, Human capital and research, Institutions.

**Knowledge and technology outputs**
- Top 10 | Score: 58.96
- Sri Lanka | Score: 21.48
- Central and Southern Asia | Score: 20.48
- Lower middle income | Score: 17.21

**Creative outputs**
- Top 10 | 56.09
- Sri Lanka | 18.57
- Central and Southern Asia | 17.93
- Lower middle income | 16.36

**Business sophistication**
- Top 10 | 64.39
- Sri Lanka | 26.87
- Central and Southern Asia | 22.96
- Lower middle income | 22.71

**Market sophistication**
- Top 10 | 61.93
- Sri Lanka | 22.43
- Central and Southern Asia | 33.20
- Lower middle income | 28.01

**Human capital and research**
- Top 10 | 60.28
- Central and Southern Asia | 23.87
- Lower middle income | 21.73
- Sri Lanka | 17.28

**Infrastructure**
- Top 10 | 62.83
- Sri Lanka | 35.52
- Central and Southern Asia | 30.45
- Lower middle income | 27.83

**Institutions**
- Top 10 | 79.85
- Lower middle income | 39.43
- Central and Southern Asia | 38.68
- Sri Lanka | 30.81
## Innovation strengths and weaknesses in Sri Lanka

The table below gives an overview of the indicator strengths and weaknesses of Sri Lanka in the GII 2023.

*Sri Lanka's main innovation strengths are GDP/unit of energy use (rank 6), ICT services exports, % total trade (rank 14) and Software spending, % GDP (rank 20).*

### Strengths

<table>
<thead>
<tr>
<th>Rank</th>
<th>Code</th>
<th>Indicator name</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3.3.1</td>
<td>GDP/unit of energy use</td>
</tr>
<tr>
<td>14</td>
<td>6.3.4</td>
<td>ICT services exports, % total trade</td>
</tr>
<tr>
<td>20</td>
<td>6.2.3</td>
<td>Software spending, % GDP</td>
</tr>
<tr>
<td>24</td>
<td>5.3.2</td>
<td>High-tech imports, % total trade</td>
</tr>
<tr>
<td>40</td>
<td>5.2.4</td>
<td>Joint venture/strategic alliance deals/bn PPP$ GDP</td>
</tr>
<tr>
<td>42</td>
<td>5.1.4</td>
<td>GERD financed by business, %</td>
</tr>
<tr>
<td>46</td>
<td>5.2.2</td>
<td>State of cluster development</td>
</tr>
<tr>
<td>49</td>
<td>5.2.1</td>
<td>University-industry R&amp;D collaboration</td>
</tr>
<tr>
<td>51</td>
<td>7.3.3</td>
<td>GitHub commits/mn pop. 15-69</td>
</tr>
<tr>
<td>56</td>
<td>7.2.4</td>
<td>Creative goods exports, % total trade</td>
</tr>
</tbody>
</table>

### Weaknesses

<table>
<thead>
<tr>
<th>Rank</th>
<th>Code</th>
<th>Indicator name</th>
</tr>
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<tbody>
<tr>
<td>130</td>
<td>1.2.3</td>
<td>Cost of redundancy dismissal</td>
</tr>
<tr>
<td>120</td>
<td>2.1.1</td>
<td>Expenditure on education, % GDP</td>
</tr>
<tr>
<td>105</td>
<td>2.2.3</td>
<td>Tertiary inbound mobility, %</td>
</tr>
<tr>
<td>97</td>
<td>2.1.2</td>
<td>Government funding/pupil, secondary, % GDP/cap</td>
</tr>
<tr>
<td>97</td>
<td>4.2.4</td>
<td>VC received, value, % GDP</td>
</tr>
<tr>
<td>92</td>
<td>4.2.2</td>
<td>Venture capital (VC) investors, deals/bn PPP$ GDP</td>
</tr>
<tr>
<td>74</td>
<td>7.1.3</td>
<td>Global brand value, top 5,000</td>
</tr>
<tr>
<td>71</td>
<td>2.3.4</td>
<td>QS university ranking, top 3</td>
</tr>
<tr>
<td>48</td>
<td>6.2.2</td>
<td>Unicorn valuation, % GDP</td>
</tr>
<tr>
<td>40</td>
<td>2.3.3</td>
<td>Global corporate R&amp;D investors, top 3, mn US$</td>
</tr>
</tbody>
</table>
Sri Lanka’s innovation system

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

Innovation inputs in Sri Lanka

2.1.1 Expenditure on education, % GDP
was equal to 1.99% GDP in 2018, down by 0.6 percentage points from the year prior – and equivalent to an indicator rank of 120.

2.2.2 Graduates in science and engineering, %
was equal to 24.08% of total tertiary graduates in 2021, up by 3.41 percentage points from the year prior – and equivalent to an indicator rank of 48.

2.3.2 Gross expenditure on R&D, % GDP
was equal to 0.119% GDP in 2018, up by 0.0013 percentage points from the year prior – and equivalent to an indicator rank of 101.

2.3.4 QS university ranking, top 3
was equal to an average score of 0 for the top 3 universities in 2022, equivalent to an indicator rank of 71.

2.3.1 Researchers, FTE/mn pop.
was equal to 105.61 FTE/mn pop. in 2018, down by 0.74% from the year prior – and equivalent to an indicator rank of 89.

3.1.1 ICT access
was equal to a score of 8.1 in 2021, down by 0.25% from the year prior – and equivalent to an indicator rank of 88.
4.2.4 VC received, value, % GDP
was equal to 0.00001% GDP in 2022, down by 0.0000047 percentage points from the year prior – and equivalent to an indicator rank of 97.

4.3.2 Domestic industry diversification
was equal to an index score of 0.221 in 2019, up by 0.61% from the year prior – and equivalent to an indicator rank of 74.

5.1.1 Knowledge-intensive employment, %
was equal to 21.73% in 2020, down by 2.39 percentage points from the year prior – and equivalent to an indicator rank of 70.
6.1.1 Patents by origin
was equal to 0.27 Thousands in 2021, down by 24.65% from the year prior – and equivalent to an indicator rank of 66.

6.1.5 Citable documents H-index
was equal to an index value of 245 in 2022, up by 8.89% from the year prior – and equivalent to an indicator rank of 70.

6.2.2 Unicorn valuation, % GDP
was equal to 0 % GDP in 2023 – and equivalent to an indicator rank of 48.

6.2.3 Software spending, % GDP
was equal to 0.545% GDP in 2022, up by 0.14 percentage points from the year prior – and equivalent to an indicator rank of 20.

6.2.4 High-tech manufacturing, %
was equal to 7.94% of total manufacturing output in 2019, up by 0.49 percentage points from the year prior – and equivalent to an indicator rank of 95.

6.3.2 Production and export complexity
was equal to a score of –0.193 in 2020, up by 14.61% from the year prior – and equivalent to an indicator rank of 71.
6.3.3 High-tech exports
was equal to 134,829,511 USD in 2021, down by 13.47% from the year prior – and equivalent to an indicator rank of 78.

7.1.1 Intangible asset intensity, top 15, %
was equal to 46.56% in 2022, up by 11.52 percentage points from the year prior – and equivalent to an indicator rank of 54.

7.1.3 Global brand value, top 5,000
was equal to 0 bn USD in 2023, down by 100% from the year prior – and equivalent to an indicator rank of 74.

7.3.4 Mobile app creation/bn PPP$ GDP
was equal to 33,419.7 Apps/bn PPP$ GDP in 2022, up by 9.34% from the year prior – and equivalent to an indicator rank of 89.
Sri Lanka's innovation top performers

2.3.4 QS university ranking of Sri Lanka’s top universities

<table>
<thead>
<tr>
<th>Rank</th>
<th>University</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001-1200</td>
<td>UNIVERSITY OF PERADENiya</td>
<td>7.90</td>
</tr>
<tr>
<td>1201-1400</td>
<td>UNIVERSITY OF COLOMBO</td>
<td>6.40</td>
</tr>
</tbody>
</table>

Source: QS Quacquarelli Symonds Ltd (https://www.topuniversities.com/university-rankings/world-university-rankings/2023). Note: QS Quacquarelli Symonds Ltd annually assesses over 1,200 universities across the globe and scores them between [0,100]. Ranks can represent a single value "x"; a tie "x±" or a range "x-y".

7.1.1 Top 15 intangible-asset intensive companies in Sri Lanka

<table>
<thead>
<tr>
<th>Rank</th>
<th>Firm</th>
<th>Intensity, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LANKA IOC PLC</td>
<td>43.89</td>
</tr>
<tr>
<td>2</td>
<td>SOFTLOGIC HOLDINGS PLC</td>
<td>30.55</td>
</tr>
<tr>
<td>3</td>
<td>RICHARD PERIS &amp; CO PLC</td>
<td>31.98</td>
</tr>
</tbody>
</table>

Global Innovation Index 2023

Sri Lanka

Output rank: 79
Input rank: 103
Income rank: Lower middle
Region: CSA
Population (mn): 21.8
GDP, PPP$ (bn): 318.7
GDP per capita, PPP$: 14,230.1

Business sophistication

5.1 Knowledge workers
5.1.1 Knowledge-intensive employment, %
5.1.2 Firms offering formal training, %
5.1.3 GERD performed by business, % GDP
5.1.4 GERD financed by business, %
5.1.5 Females employed w/advanced degrees, %
5.2 Innovation linkages
5.2.1 University-industry R&D collaboration
5.2.2 State of cluster development
5.2.3 GERD financed by abroad, % GDP
5.2.4 Joint venture/strategic alliance deals/bn PPP$ GDP
5.2.5 Patent families/bn PPP$ GDP
5.3 Knowledge absorption

Knowledge and technology outputs

6.1 Knowledge creation
6.1.1 Patents by origin/bn PPP$ GDP
6.1.2 PCT patents by origin/bn PPP$ GDP
6.1.3 Utility models by origin/bn PPP$ GDP
6.1.4 Scientific and technical articles/bn PPP$ GDP
6.1.5 Oable documents H-index
6.2 Knowledge impact
6.2.1 Labor productivity growth, %
6.2.2 Uncorn valuation, % GDP
6.2.3 Software spending, % GDP
6.2.4 High-tech manufacturing, %
6.3 Knowledge diffusion
6.3.1 Intellectual property receipt/s, total trade
6.3.2 Production and export complexity
6.3.3 High-tech exports, % total trade
6.3.4 ICT services exports, % total trade
6.3.5 ISO 9001 quality/bn PPP$ GDP

Creative outputs

7.1 Intangible assets
7.1.1 Intangible asset intensity, top 15, %
7.1.2 Trademarks by origin/bn PPP$ GDP
7.1.3 Global brand value, top 500
7.1.4 Industrial designs by origin/bn PPP$ GDP
7.2 Creative goods and services
7.2.1 Cultural and creative services exports, % total trade
7.2.2 National feature films/mn pop, 15-69
7.2.3 Entertainment and media market/sh pop, 15-69
7.2.4 Creative goods exports, % total trade
7.3 Online creativity
7.3.1 Generic top-level domains (TLDs)/sh pop, 15-69
7.3.2 Country-code TLDs/sh pop, 15-69
7.3.3 GitHub commits/mn pop, 15-69
7.3.4 Mobile app creation/bn PPP$ GDP

NOTES: * indicates a strength; O a weakness; © an income group strength; © 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/igi-ranking. 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 Sri Lanka.

> Sri Lanka has missing data for eleven indicators and outdated data for fifteen indicators.

### Missing data for Sri Lanka

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator name</th>
<th>Economy Year</th>
<th>Model Year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3.2</td>
<td>Entrepreneurship policies and culture</td>
<td>n/a</td>
<td>2022</td>
<td>Global Entrepreneurship Monitor</td>
</tr>
<tr>
<td>2.1.4</td>
<td>PISA scales in reading, maths and science</td>
<td>n/a</td>
<td>2018</td>
<td>OECD, PISA</td>
</tr>
<tr>
<td>4.1.1</td>
<td>Finance for startups and scaleups</td>
<td>n/a</td>
<td>2022</td>
<td>Global Entrepreneurship Monitor</td>
</tr>
<tr>
<td>4.1.3</td>
<td>Loans from microfinance institutions, % GDP</td>
<td>n/a</td>
<td>2021</td>
<td>International Monetary Fund, Financial Access Survey (FAS)</td>
</tr>
<tr>
<td>5.1.2</td>
<td>Firms offering formal training, %</td>
<td>n/a</td>
<td>2019</td>
<td>World Bank Enterprise Surveys</td>
</tr>
<tr>
<td>5.3.1</td>
<td>Intellectual property payments, % total trade</td>
<td>n/a</td>
<td>2021</td>
<td>World Trade Organization and United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>6.1.3</td>
<td>Utility models by origin\bn PPPS GDP</td>
<td>n/a</td>
<td>2021</td>
<td>World Intellectual Property Organization; International Monetary Fund</td>
</tr>
<tr>
<td>6.3.1</td>
<td>Intellectual property receipts, % total trade</td>
<td>n/a</td>
<td>2021</td>
<td>World Trade Organization and United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>7.2.1</td>
<td>Cultural and creative services exports, % total trade</td>
<td>n/a</td>
<td>2021</td>
<td>World Trade Organization and United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>7.2.2</td>
<td>National feature films,\nn pop. 15–69</td>
<td>n/a</td>
<td>2021</td>
<td>OMDIA; United Nations, World Population Prospects</td>
</tr>
<tr>
<td>7.2.3</td>
<td>Entertainment and media market,\n pop. 15–69</td>
<td>n/a</td>
<td>2022</td>
<td>PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund</td>
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</tbody>
</table>

### Outdated data for Sri Lanka

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator name</th>
<th>Economy Year</th>
<th>Model Year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1</td>
<td>Expenditure on education, % GDP</td>
<td>2018</td>
<td>2021</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>2.1.2</td>
<td>Government funding/pupil, secondary, % GDP/cap</td>
<td>2018</td>
<td>2019</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>Code</td>
<td>Indicator name</td>
<td>Economy Year</td>
<td>Model Year</td>
<td>Source</td>
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<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2.1.3</td>
<td>School life expectancy, years</td>
<td>2018</td>
<td>2020</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>2.3.1</td>
<td>Researchers, FTE/mn pop.</td>
<td>2018</td>
<td>2021</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
</tr>
<tr>
<td>2.3.2</td>
<td>Gross expenditure on R&amp;D, % GDP</td>
<td>2018</td>
<td>2021</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
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<tr>
<td>3.2.1</td>
<td>Electricity output, GWh/mn pop.</td>
<td>2020</td>
<td>2021</td>
<td>International Energy Agency</td>
</tr>
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<td>4.1.2</td>
<td>Domestic credit to private sector, % GDP</td>
<td>2019</td>
<td>2020</td>
<td>International Monetary Fund; World Bank and OECD GDP estimates.</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Domestic industry diversification</td>
<td>2019</td>
<td>2020</td>
<td>United Nations Industrial Development Organization</td>
</tr>
<tr>
<td>5.1.1</td>
<td>Knowledge-intensive employment, %</td>
<td>2020</td>
<td>2022</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>5.1.3</td>
<td>GERD performed by business, % GDP</td>
<td>2017</td>
<td>2021</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
</tr>
<tr>
<td>5.1.4</td>
<td>GERD financed by business, %</td>
<td>2017</td>
<td>2020</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
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<tr>
<td>5.1.5</td>
<td>Females employed w/advanced degrees, %</td>
<td>2020</td>
<td>2022</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>5.2.3</td>
<td>GERD financed by abroad, % GDP</td>
<td>2017</td>
<td>2020</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
</tr>
<tr>
<td>5.3.5</td>
<td>Research talent, % in businesses</td>
<td>2017</td>
<td>2021</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
</tr>
<tr>
<td>6.2.4</td>
<td>High-tech manufacturing, %</td>
<td>2019</td>
<td>2020</td>
<td>United Nations Industrial Development Organization</td>
</tr>
</tbody>
</table>
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.