

CAMBODIA

110th Cambodia ranks 110th among the 131 economies featured in the GI 2020.

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 GI aims to capture the multi-dimensional facets of innovation.

The following table shows the rankings of Cambodia over the past three years, noting that data availability and changes to the GI model framework influence year-on-year comparisons of the GI rankings. The statistical confidence interval for the ranking of Cambodia in the GI 2020 is between ranks 103 and 111.

Rankings of Cambodia (2018–2020)

	GII	Innovation inputs	Innovation outputs
2020	110	117	101
2019	98	104	84
2018	98	103	84

- Cambodia performs better in innovation outputs than innovation inputs in 2020.
- This year Cambodia ranks 117th in innovation inputs, lower than last year and lower compared to 2018.
- As for innovation outputs, Cambodia ranks 101st. This position is lower than last year and lower compared to 2018.

21st Cambodia ranks 21st among the 29 lower middle-income group economies.

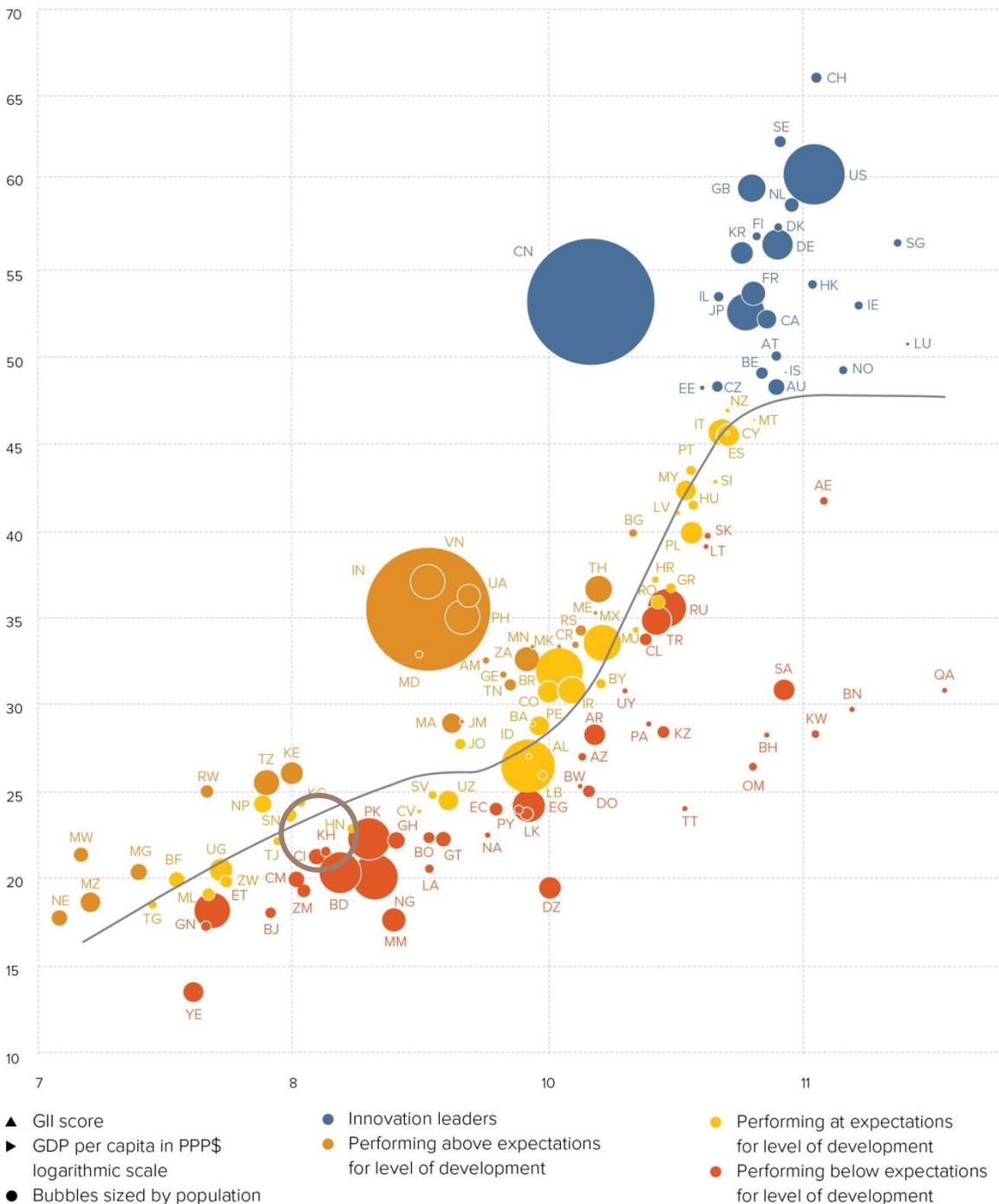
15th Cambodia ranks 15th among the 17 economies in South East Asia, East Asia, and Oceania.

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, Cambodia is performing below expectations for its level of development.

The positive relationship between innovation and development

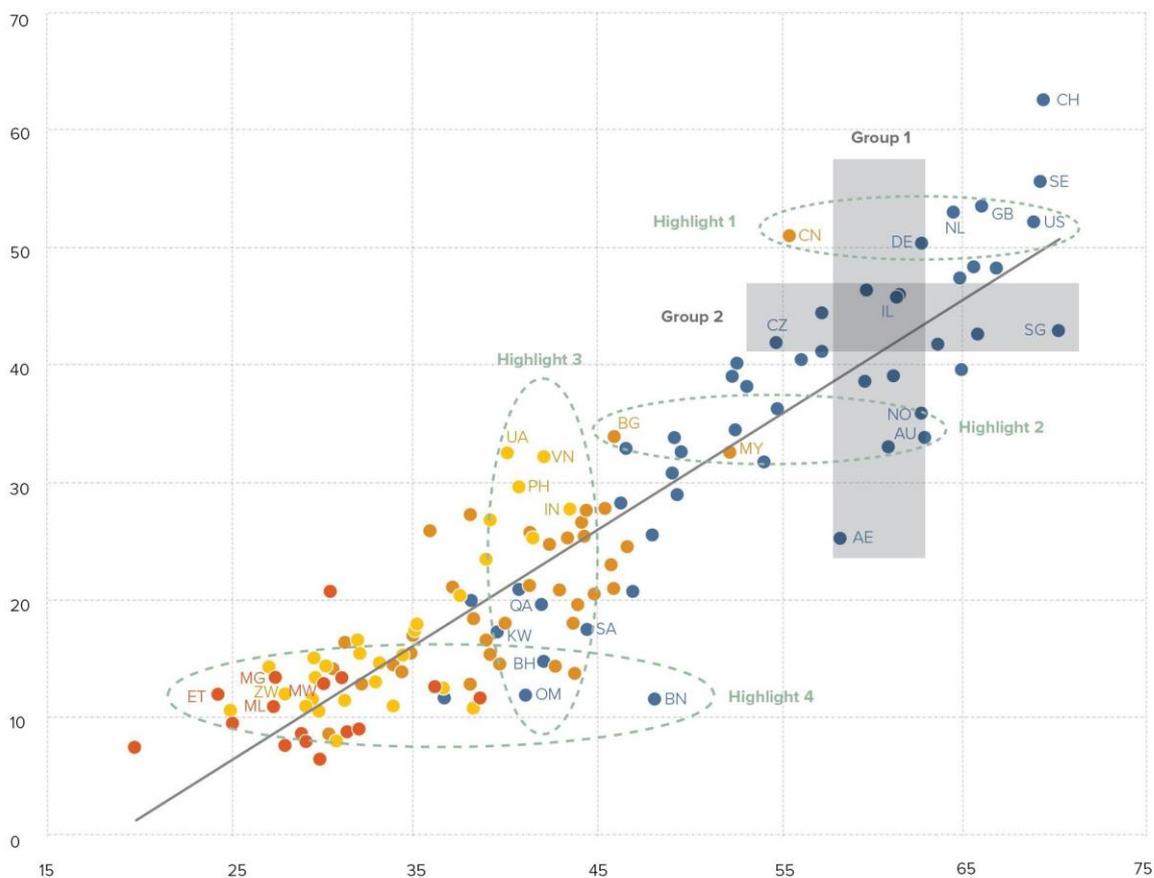


EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

Cambodia produces more innovation outputs relative to its level of innovation investments.

Innovation input to output performance, 2020

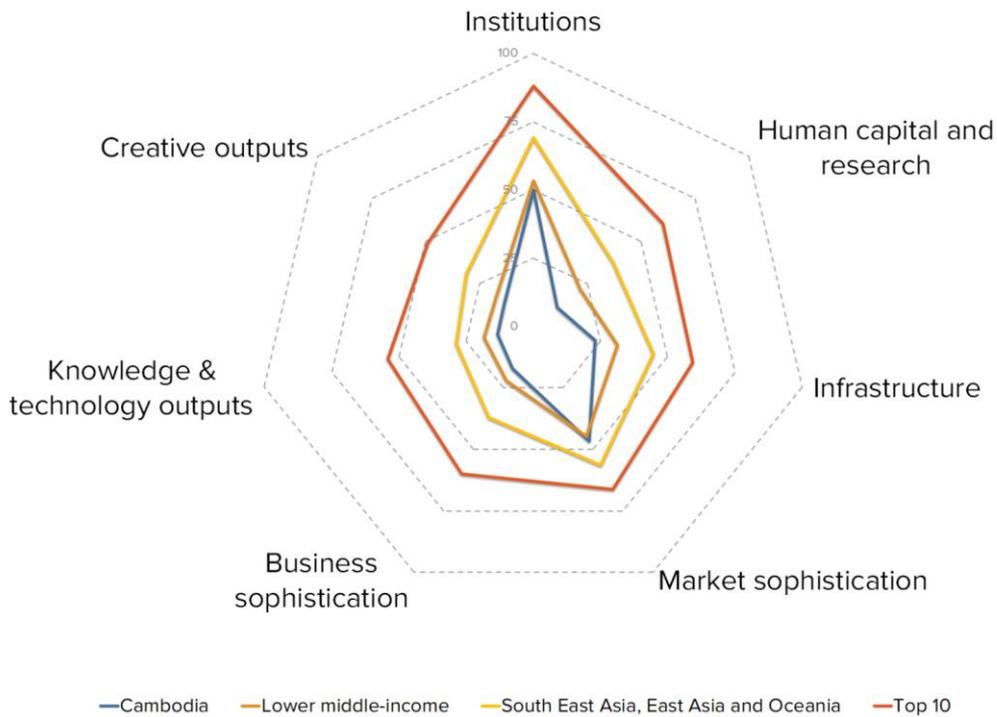


- ▲ Output score
- ▶ Input score
- High income group
- Upper middle-income group
- Lower middle-income group
- Low income group
- Fitted values

AU	Australia	IN	India	NL	Netherlands	CH	Switzerland
BH	Bahrain	IL	Israel	NO	Norway	UA	Ukraine
BN	Brunei Darussalam	KW	Kuwait	OM	Oman	AE	United Arab Emirates
BG	Bulgaria	MG	Madagascar	PH	Philippines	GB	United Kingdom
CN	China	MW	Malawi	QA	Qatar	US	United States of America
CZ	Czech Republic	ML	Mali	SA	Saudi Arabia	VN	Viet Nam
ET	Ethiopia	MY	Malaysia	SG	Singapore	ZW	Zimbabwe
DE	Germany			SE	Sweden		

BENCHMARKING CAMBODIA AGAINST OTHER LOWER MIDDLE-INCOME GROUP ECONOMIES AND SOUTH EAST ASIA, EAST ASIA, AND OCEANIA

Cambodia's scores in the seven GII pillars



Lower middle-income group economies

Cambodia has high scores in one out of the seven GII pillars: Market sophistication, which is above average for the lower middle-income group.

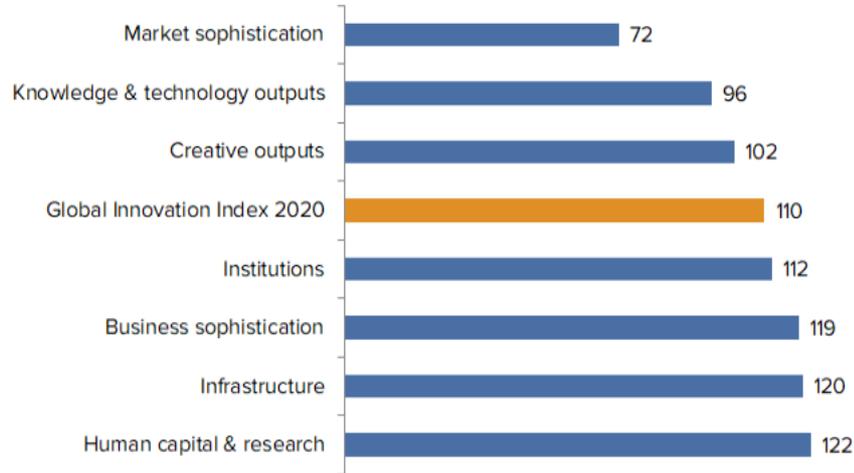
Conversely, Cambodia scores below average for its income group in six pillars: Institutions, Human capital & research, Infrastructure, Business sophistication, Knowledge & technology outputs and Creative outputs

South East Asia, East Asia, and Oceania

Compared to other economies in South East Asia, East Asia, and Oceania, Cambodia performs below average in all seven of the GII pillars.

OVERVIEW OF CAMBODIA RANKINGS IN THE SEVEN GII AREAS

Cambodia performs best in Market sophistication and its weakest performance is in Human capital & research.



*The highest possible ranking in each pillar is 1.

INNOVATION STRENGTHS AND WEAKNESSES

The table below gives an overview of the strengths and weaknesses of Cambodia in the GII 2020.

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
1.1.1	Political & operational stability*	49	1.2.2	Rule of law*	126
4.1	Credit	11	1.3	Business environment	127
4.1.1	Ease of getting credit*	23	1.3.1	Ease of starting a business*	131
4.1.2	Domestic credit to private sector, % GDP	24	2.1	Expenditure on education, % GDP	113
4.1.3	Microfinance gross loans, % GDP	2	2.3.3	Global R&D companies, top 3, mn US\$	42
4.2.3	Venture capital deals/bn PPP\$ GDP	33	2.3.4	QS university ranking, average score top 3*	77
5.2	Innovation linkages	45	3.1.4	E-participation*	126
5.2.2	State of cluster development†	61	5.3	Knowledge absorption	129
5.2.4	JV–strategic alliance deals/bn PPP\$ GDP	36	5.3.2	High-tech imports, % total trade	127
5.3.4	FDI net inflows, % GDP	7	6.1.1	Patents by origin/bn PPP\$ GDP	126
6.2.1	Growth rate of PPP\$ GDP/worker, %	8	6.1.2	PCT patents by origin/bn PPP\$ GDP	100
7.1.4	ICTs & organizational model creation†	41	7.1.2	Global brand value, top 5,000, % GDP	80

STRENGTHS

GII strengths for Cambodia are found in five of the seven GII pillars.

- Institutions (112): the indicator Political & operational stability (49) demonstrates a strength.
- Market sophistication (72): exhibits strengths in the sub-pillar Credit (11) and in the indicators Ease of getting credit (23), Domestic credit to private sector (24), Microfinance gross loans (2) and Venture capital deals (33).
- Business sophistication (119): displays strengths in the sub-pillar Innovation linkages (45) and in the indicators State of cluster development (61), JV–strategic alliance deals (36) and FDI net inflows (7).
- Knowledge & technology outputs (96): the indicator Growth rate of PPP (8) reveals a strength.
- Creative outputs (102): shows strength in the indicator ICTs & organizational model creation (41).

WEAKNESSES

GII weaknesses for Cambodia are found in six of the seven GII pillars.

- Institutions (112): exhibits weaknesses in the sub-pillar Business environment (127) and in the indicators Rule of law (126) and Ease of starting a business (131).
- Human capital & research (122): shows weaknesses in the indicators Expenditure on education (113), Global R&D companies (42) and QS university ranking (77).
- Infrastructure (120): the indicator E-participation (126) reveals a weakness.
- Business sophistication (119): demonstrates weaknesses in the sub-pillar Knowledge absorption (129) and in the indicator High-tech imports (127).
- Knowledge & technology outputs (96): displays weaknesses in the indicators Patents by origin (126) and PCT patents by origin (100).
- Creative outputs (102): reveals a weakness in the indicator Global brand value (80).

DATA AVAILABILITY

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

Missing data

Code	Indicator name	Country year	Model year	Source
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2016	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	n/a	2017	UNESCO Institute for Statistics
2.1.4	PISA scales in reading, maths & science	n/a	2018	OECD Programme for International Student Assessment (PISA)
2.2.3	Tertiary inbound mobility, %	n/a	2017	UNESCO Institute for Statistics
4.2.2	Market capitalization, % GDP	n/a	2018	World Federation of Exchanges
5.2.5	Patent families 2+ offices/bn PPP\$ GDP	n/a	2016	World Intellectual Property Organization
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2018	World Intellectual Property Organization
6.2.5	High- & medium-high-tech manufacturing, %	n/a	2017	United Nations Industrial Development Organization
7.2.1	Cultural & creative services exports, % total trade	n/a	2018	World Trade Organization
7.2.3	Entertainment & Media market/th pop. 15–69	n/a	2018	PwC
7.2.4	Printing & other media, % manufacturing	n/a	2017	United Nations Industrial Development Organization

Outdated data

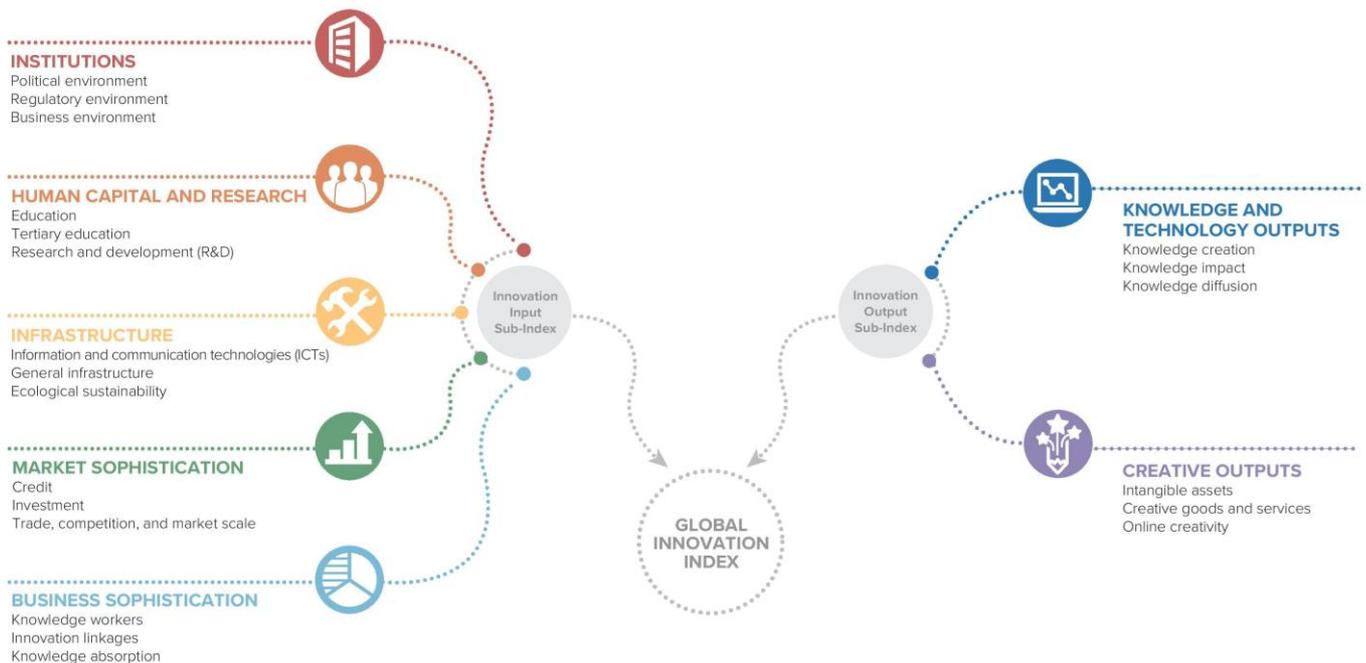
Code	Indicator name	Country year	Model year	Source
2.2.2	Graduates in science & engineering, %	2015	2017	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	2015	2018	UNESCO Institute for Statistics; Eurostat; OECD – Main Science and Technology Indicators
2.3.2	Gross expenditure on R&D, % GDP	2015	2018	UNESCO Institute for Statistics; Eurostat; OECD – Main Science and Technology Indicators
4.3.1	Applied tariff rate, weighted avg., %	2016	2018	World Bank
5.1.1	Knowledge-intensive employment, %	2016	2018	International Labour Organization
5.1.2	Firms offering formal training, %	2015	2018	World Bank
5.1.3	GERD performed by business, % GDP	2015	2018	UNESCO Institute for Statistics; Eurostat; OECD – Main Science and Technology Indicators
5.1.4	GERD financed by business, %	2015	2017	UNESCO Institute for Statistics; Eurostat; OECD – Main Science and Technology Indicators
5.1.5	Females employed w/advanced degrees, %	2016	2018	International Labour Organization
5.2.3	GERD financed by abroad, % GDP	2015	2017	UNESCO Institute for Statistics
5.3.2	High-tech imports, % total trade	2016	2018	United Nations, COMTRADE
5.3.5	Research talent, % in business enterprise	2015	2018	UNESCO Institute for Statistics; Eurostat; OECD – Main Science and Technology Indicators
6.1.1	Patents by origin/bn PPP\$ GDP	2016	2018	World Intellectual Property Organization
6.3.2	High-tech net exports, % total trade	2016	2018	United Nations, COMTRADE
7.1.3	Industrial designs by origin/bn PPP\$ GDP	2015	2018	World Intellectual Property Organization

ABOUT THE GLOBAL INNOVATION INDEX

The Global Innovation Index (GII) is co-published by Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations. In 2020, the GII presents its 13th edition devoted to the theme *Who Will Finance Innovation?*

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.

Framework of the Global Innovation Index 2020



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.

