

Global Innovation Index (GII) - UPSC Notes

The Global Innovation Index (GII) 2020 was recently released. India moved up four places to reach rank 48 in the index. In this article, you can read all about the Global Innovation Index, its significance, implications for India and other details for the [UPSC IAS exam](#).

Global Innovation Index (GII)

The **GII** is an index that provides detailed metrics about the **innovation performance** of 131 countries and economies all over the world.

- The index was first released in 2007 and is released annually.
- It is published by INSEAD, Cornell University and the World Intellectual Property Organization ([WIPO](#)), along with other institutions.
- The index uses 80 indicators that take into account a wide idea of innovation including education, political environment, business sophistication and infrastructure.
- The index is based on both objective and subjective data compiled from various sources including the World Bank, the [International Telecommunication Union \(ITU\)](#) and the International Monetary Fund.
- The **GII** has become an important reference for governments and businesses to measure a country's performance on innovation.

How is the Global Innovation Index calculated?

The **GII** is calculated by taking a simple average of the scores in two sub-indices. The sub-indices are:

1. Innovation Input Index (composed of five pillars)
2. Innovation Output Index (composed of two pillars)

Both the pillars describe an attribute of innovation each and contain up to five indicators. Their score is computed by the weighted average method.

GII 2020

The **GII 2020** is the 13th edition of the index. The theme for the 2020 index is **“Who will Finance Innovation?”**

- According to **GII 2020**, the world's most innovative economy is Switzerland. It has been ranked number one for the last ten years.
- Sweden is at number two, followed by the USA, the UK and the Netherlands.
- Among the top ten ranks are seven European countries.
- Regional leaders topping include India, Chile, Israel, South Africa, and Singapore.
- Vietnam, China and Tanzania top their respective income groups.
- The ranking is dominated by developed countries and China is the only middle-income country to feature under 30. It has been ranked 14th for the second year in a row. China's indicators related to patents, utility models, trademarks, industrial designs, and creative goods exports are good.
- The **GII** has also been publishing a ranking of the world's top 100 science and technology hotspots since the last four years.
 - Tokyo-Yokohama is the top-performing hotspot in 2020, followed by Shenzhen-Hong Kong-Guangzhou, Seoul, Beijing, and San Jose-San Francisco.
 - The largest number of hotspots in the world is in the US with 25 hotspots.

- The top 100 hotspots are in 26 countries out of which six are middle-income countries. They are India, Brazil, China, Iran, Russia and Turkey.
- At rank 48, India is the third-most innovative lower-middle-income economy in the world.
- One of the findings of the report was that the money to fund innovative ventures was drying up. VC deals are in a decline across North America, Asia and Europe.
- The report also pointed out that the COVID-19 pandemic has spurred innovation in many traditional and new sectors such as tourism, retail, education and health.

The following images give the Regional Leaders of the various groupings.

NORTH AMERICA		
Regional Rank	Country	GII Rank
1	USA	3
2	Canada	17

LATIN AMERICA AND THE CARIBBEAN		
Regional Rank	Country	GII Rank
1	Chile	54
2	Mexico	55
3	Costa Rica	56
4	Brazil	62
5	Colombia	68

EUROPE		
Regional Rank	Country	GII Rank
1	Switzerland	1
2	Sweden	2
3	United Kingdom	4
4	Netherlands	5
5	Denmark	6

SUB-SAHARAN AFRICA		
Regional Rank	Country	GII Rank
1	Mauritius	52
2	South Africa	60
3	Kenya	86

4	Tanzania	88
5	Botswana	89

NORTHERN AFRICA AND WESTERN ASIA		
Regional Rank	Country	GII Rank
1	Israel	13
2	Cyprus	29
3	United Arab Emirates	34
4	Turkey	51
5	Armenia	61

CENTRAL AND SOUTHERN ASIA		
Regional Rank	Country	GII Rank
<i>1</i>	<i>India</i>	<i>48</i>
2	Iran	67
3	Kazakhstan	77
4	Uzbekistan	93
5	Kyrgyzstan	94

SOUTHEAST ASIA, EAST ASIA, OCEANIA		
Regional Rank	Country	GII Rank
1	Singapore	8
2	South Korea	10
3	Hong Kong, China	11
4	China	14
5	Japan	16

GII and India

As seen from the table above, India is the top country in its group, which is Central and Southern Asia.

- India is ranked 48, four places above the previous year's rank.
- This is for the first time that India is ranked under 50 in the GII.
- India is now the third-most innovative lower-middle-income economy in the world.
- India ranks in the top 15 in the following indicators:
 - Government online services
 - ICT services export
 - Graduates in science and engineering

- R&D-intensive global companies
- The report states that India has the highest innovation quality among lower-middle-income countries.

