



Global Innovation Index 2023

For Prelims: Global Innovation Index 2023, [World Intellectual Property Organization \(WIPO\)](#), [United Nations](#), South East Asia, East Asia and Oceania (SEAO) region, Science and Technology Cluster.

For Mains: Global Innovation Index 2023, Growth and development of India in Innovation.

Source: [PIB](#)

Why in News?

India retains **40th rank out of 132 economies** in the **Global Innovation Index 2023** rankings published by the [World Intellectual Property Organization \(WIPO\)](#).

- The 2023 edition reveals the ranking of **this year's most innovative economies** in the world amongst 132 economies and localizes the top 100 science and technology innovation clusters.

Note

GII is a **leading reference for measuring an economy's innovation** ecosystem performance. Published annually, it is also a valuable benchmarking tool used by policymakers, business leaders, and other stakeholders to assess progress in innovation over time.

What is WIPO?

- WIPO is the global forum for [Intellectual Property \(IP\) services](#), policy, information and cooperation.
- It is a self-funding agency of the [United Nations](#), with 193 member states.
- Its aim is to lead the development of a balanced and effective international IP system that enables innovation and creativity for the benefit of all.
- Its mandate, governing bodies and procedures are set out in the WIPO Convention, which established WIPO in 1967.

What are the Key Highlights of the Index?

- **Most Innovative Economies in 2023:**
 - Switzerland is the most innovative economy in 2023 **followed by Sweden**, the United States, the United Kingdom and Singapore.
 - Singapore has **entered the top five**, and has taken the leading position among **South East Asia, East Asia and Oceania (SEAO) region economies**.
- **Top Science and Technology (S&T) Clusters in the World:**
 - The top Science and Technology innovation clusters in the world in 2023 are

Tokyo-Yokohama, followed by Shenzhen-Hong Kong-Guangzhou, Seoul, Beijing and Shanghai-Suzhou.

- S&T clusters are the areas in the world where the highest density of inventors and scientific authors are located.
- China now has the **largest number of clusters in the world**, overtaking the United States.

What are the Key Highlights Related to India?

▪ Overall Ranking and Growth:

- India secured the 40th position in the latest GII 2023, showcasing a **remarkable climb from the 81th spot in 2015**.
 - This ascent underscores **India's consistent and substantial growth in innovation** over the past eight years.
- India secured the **top position among the 37 lower-middle-income countries** and leading among the 10 economies in Central and South America.
 - Key indicators affirmed India's robust innovation landscape, including significant rankings in ICT services exports, venture capital received, graduates in science and engineering, and global corporate R&D investors.

▪ S&T Clusters:

- Compared to **China's 24 and US's 21**, India has only 4 S&T clusters among the world's top 100. These are **Chennai, Bengaluru , Mumbai and Delhi**.

▪ India's Progress:

- India's progress is attributed to its **abundant knowledge capital** and a thriving **Startup Ecosystem**, along with commendable efforts from public and private research organizations.
- The **Covid-19** pandemic emphasized the **vital role of innovation in addressing challenges**, aligning with the nation's vision of Atma Nirbhar Bharat (Self-reliant India).

▪ Need for Improvement:

- Certain areas necessitate improvement, particularly **infrastructure, business sophistication, and institutions**.
 - To bridge these gaps, **NITI Aayog** is actively working to promote policy-led innovation in crucial sectors such as electric vehicles, biotechnology, nanotechnology, space, and alternative energy sources.

What are the Initiatives Related to Innovation in India?

- **Digital India**
- **Unified Payments Interface (UPI)**.
- **National Education Policy**
- **Atal Tinkering Labs**