



Global Innovation Index 2022

For Prelims: Global Innovation Index 2022, World Intellectual Property Organisation

For Mains: Growth & Development, Global Innovation Index 2022

Why in News?

Recently, India was ranked 40th position out of 132 in the **Global Innovation Index (GII) 2022 rankings** released by **World Intellectual Property Organisation (WIPO)**.

- India was ranked 46th position in 2021, and 81st rank in 2015.

What are the Highlights of the Report?

- **Ranking of the Countries:**
 - **Most Innovative Economy:**
 - Switzerland is the most innovative economy in the world in 2022 - for the 12th year in a row - followed by the United States, Sweden, the United Kingdom and the Netherlands.
 - China is nearing the top 10 while **Türkiye and India enter the top 40 for the first time.**
 - **Performance of India:**
 - **India is the innovation leader** in the lower middle-income group.
 - It continues to lead the **world in ICT services exports** and holds top rankings in other indicators, including venture capital receipt value, finance for [startups](#) and scaleups, graduates in science and engineering, labor productivity growth and domestic industry diversification.
- **Increase in R & D Expenditure:**
 - The top global corporate R&D spenders increased their **R&D expenditure by almost 10% to over USD 900 billion in 2021**, higher than in 2019 before the pandemic.
- **Venture Capital (VC) Growth:**
 - It exploded by 46% in 2021, recording levels comparable to the internet boom years of the late 1990s. Latin America and the Caribbean and Africa regions are witnessing the strongest VC growth.

What is the Global Innovation Index?

- **About:**
 - The Global Innovation Index, which is **published annually**, has been a **leading reference for measuring an economy's innovation performance.**
 - A large number of countries use the GI to **assess and improve their innovation ecosystems** and use the GI as a reference in economic plans and/or policies.
 - The GI has also been **recognized by the UN Economic and Social Council** in its 2019 resolution on Science, Technology and Innovation for Development as an authoritative

benchmark for measuring innovation in relation to the [Sustainable Development Goals \(SDGs\)](#).

- **Indicators of the index:**
 - Parameters for computing the index include 'institutions', 'human capital and research', 'infrastructure', 'market sophistication', 'business sophistication', 'knowledge and technology outputs' and 'create outputs'.
- **Theme for 2022:** “What is the future of innovation-driven growth?”.
- **Effects of Two Novel Innovation Waves:** The GII 2022 also **outlines the positive effects of two novel innovation waves**, although it emphasizes that such effects would take some time to be realized:
 - **A digital age innovation wave** built on [supercomputing](#), [artificial intelligence](#), and automation. **Effect:** making ample productivity impacts across all sectors and fields of scientific research.
 - **A Deep Science innovation wave** built on breakthroughs in biotechnologies, nanotechnologies, new materials, and other sciences. **Effect:** revolutionizing innovations in health, food, environment, and mobility (four fields of key importance to society).

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 Related Initiatives by India?

- **Digital India:**
 - India embarked on the '[Digital India](#)' **journey in 2015** and have set up a goal of a trillion-dollar digital economy in the next few years.
 - Digital technologies are used in several areas, including mapping capital assets using GIS technology and revolutionizing payments through [Unified Payments Interface \(UPI\)](#).
 - In fact, **40% of global real-time digital transactions** happened in India in 2021.
- **National Education Policy 2020:**
 - To further strengthen innovation, the [National Education Policy](#) was introduced which promoted the spirit of enquiry by setting up incubation & technology development centers.
- **Atal Tinkering Labs:**
 - Over 9000 [Atal Tinkering Labs](#) encourage youth to develop solutions to society's problems.
- **Structural Reforms in IPR:**
 - India has taken up **structural reforms to strengthen its [Intellectual property rights \(IPR\) regime](#)** including modernization of IP offices, reducing legal compliances and facilitating IP filing for start-ups, women entrepreneurs, the small industries and others.
 - Domestic filing of Patents registered a 46% growth in the last 5 years.

[Source: PIB](#)

