

Testwale Current Affairs PDF

Current Affairs search results for tag: science-and-technology

1. India to take over Chairmanship of the Global Partnership on AI from France (Nov. 21, 2022)

India to take over Chairmanship of the Global Partnership on AI from France

India will take over the Chairmanship of the Global Partnership on Artificial Intelligence (GPAI) from **France** during the **third edition of the annual Global Partnership on Artificial Intelligence (GPAI)** being held in **Tokyo**, Japan on 21 November 2022. India will be chairman for the 2022-23 period.

France will symbolically hand over the chairmanship to the Minister of State for Electronics and Information Technology **Rajeev Chandrasekhar** who is representing India at the 2day (21-22 November) Tokyo summit meet.

AI which stands for artificial intelligence refers to systems or machines that mimic human intelligence to perform tasks and can iteratively improve themselves based on the information they collect.

Artificial Intelligence is expected to contribute **450 to 500 billion US dollars** to India's GDP by 2025 accounting for 10 per cent of the country's 5 trillion dollar GDP target. It is expected to contribute 967 billion US dollars to the Indian economy by 2035.

What is Global Partnership in Artificial Intelligence?

It was launched on June 15, 2020, with fifteen members as its founding member. India is one of the founding member country of Global Partnership in Artificial Intelligence (GPAI).

The initiative facilitates international cooperation on artificial technology by bringing together on a single platform, experts from fields such as science, industry, civil society, governments, international bodies, and academia.

At present, GPAI has **twenty-five member Countries. They are** : Australia, Belgium, Brazil, Canada, Czech Republic, Denmark, France, Germany, India, Ireland, Israel, Italy, Japan, Mexico, the Netherlands, New Zealand, Poland, the Republic of Korea (South Korea), Singapore, Slovenia, Spain, Sweden, the United Kingdom, the United States, and the European Union (EU).

2. India moves up 6 place to be ranked 61st on the Network Readiness Index 2022 (Nov. 20, 2022)

India moves up 6 place to be ranked 61st

India has improved its rank by **6 places** to be ranked at **61 place** in the recently released Network Readiness Index 2022 (NRI 2022). The report prepared by the US-based non-profit body **Portulans Institute** compliments India and says that "India has a greater network readiness than would be expected given its income level".

The Network Readiness Index ranks the **131 countries** on 58 variables across four pillars of four different pillars: Technology, People, Governance, and Impact.

India's Performance

- India improved its score from 49.74 in 2021 to **51.19** in 2022.
- India has secured 1st rank in “**AI talent concentration**”,
- 2nd rank in “**Mobile broadband internet traffic within the country**” and “International Internet bandwidth”,
- 3rd rank in “**Annual investment in telecommunication services**” and “**Domestic market size**”, 4th rank in “**ICT Services exports**” and
- 5th rank in “**FTTH/Building Internet subscriptions**” and “**AI scientific publications**”.
- India is ranked **3rd** out of 36 in the group of **lower-middle-income countries** after Ukraine (50) and Indonesia (59).

Top three countries on the Network Readiness Index

The **United States** topped the list with an overall score of 80.3. It was followed by **Singapore** with a score of 79.35 and **Sweden** with a score of 78.91.

In the **Asia Pacific region**, the list was led by **Singapore**, followed by **South Korea** and **Japan**.

Full Forms

FTTH: Fiber to the Home

ICT: Information Communication Technology

AI: Artificial Intelligence

3. India's first privately built rocket, Vikram-S, launched by ISRO (Nov. 18, 2022)

India's first privately built rocket

India's first ever private [Vikram-S](#) (Suborbital) rocket was launched on 18 November from the **Satish Dhawan Space Centre, Sriharikota**.

Important facts

- The rocket reached an altitude of 89.5 km with three payloads weighing a total of 83 kilograms.
- Vikram-S, designed by **Skyroot Aerospace** as a tribute to the father of the country's space programme, **Vikram Sarabhai**, successfully completed its maiden mission.
- **Skyroot Aerospace** has become the **first privately owned rocket manufacturing company in India** after the Center opened up the space sector to private players in 2020.
- This first mission of Skyroot Aerospace has been named '**Prarambh**'.
- The rocket after taking off from Sriharikota splashed down safely in the waters of the Bay of Bengal, about 115 km away.

- Two indigenous and one foreign payloads are also going on this rocket. This six metre high rocket is the world's first all composite rocket. It has 3D-printed solids to handle its spin capability.
- Through this rocket, avionics, telemetry, tracking, inertial measurement, global positioning system, onboard camera, data acquisition and power system will be tested.
- It is a sub-orbital flight carrying satellites from **Chennai-based space startup SpaceKidz, Andhra Pradesh-based N-SpaceTech and Armenia's BazoomQ Space Research Lab.**

4. Blackstone launches its Asian Data center business from India (Nov. 16, 2022)

Blackstone launches Asian Data center

American multinational private equity investor **Blackstone** has started its data centre business in Asia from India. It plans to increase it to 600 MW over the next two years through presence in five locations in the country.

Blackstone launched its data center platform Lumina CloudInfra on 15 November 2022. The Lumina CloudInfra is owned and managed by Blackstone's Real Estate and Tactical Opportunities funds.

Initially the data center will be set up in **Mumbai** and **Chennai**, and later on it will be set up in **Delhi-NCR, Hyderabad** and **Pune**.

National Data Center

The government data center has been set up and managed by the National Informatics Centre (NIC). The first Data Centre was launched in **Hyderabad in 2008**, followed by NDC Pune in 2010, NDC Delhi in 2011 and NDC Bhubaneswar in 2018.

It operates 37 small Data Centres at various State Capitals to provide services to the Government at all levels.

National Data Centre (NDC) at **Bhubaneswar is a Cloud-enabled Data** Centre which has been offering cloud services to Government Departments since its inception.

The National Data Centres form the core of e-Governance Infrastructure in India by providing services to various e-Governance initiatives undertaken by the Government of India.

What is a Data Center?

A data center is a facility that centralizes an organization's shared IT operations and equipment for the purposes of storing, processing, and disseminating data and applications. Because they house an organization's most critical and proprietary assets, data centers are vital to the continuity of daily operations.

5. NASA launches its Artemis 1 mission from Kennedy Space Centre, Florida (Nov. 16, 2022)

NASA launches its Artemis 1 mission

The US space agency **NASA** launched its [Artemis 1 mission](#) on 16 November, 2022 from **Kennedy Space Centre, Florida.**

Important facts

- About eight minutes after launch, the **core stage's engines** cut off and the core stage separated from the rest of the rocket.
- After this, the Orion spacecraft was propelled by the **Interim Cryogenic Propulsion Stage (ICPS).**
- NASA also deployed the four solar arrays of the **Orion spacecraft.**
- After completing "translunar injection", Orion separated itself from the ICPS and is now on its way to **lunar orbit.**

About Artemis 1 mission

- For the first time in **50 years** since the end of the **Apollo program**, the launch of Artemis 1 is an ambitious US mission to return astronauts to the surface of the Moon.
- The Artemis 1 launch will also be the **first flight of NASA's 21st century moon-exploration program.**
- With Artemis 1 on the surface of the Moon, NASA aims to demonstrate new technologies, business approaches and capabilities that are essential for future explorations, including **Mars.**
- The launch aims to further aid in the study of the **Moon, its origin and history.**

ISRO's Moon Exploration Mission

- Chandrayaan 1
- Chandrayaan-2
- The Indian Space Research Organization (ISRO) recently announced India's third lunar mission Chandrayaan-3, which will consist of a lander and a rover.

6. Government has extended the term of DGCI V G Somani again by three months (Nov. 16, 2022)

The Union Ministry of Health and Family Welfare has again extended the term of the Drugs Controller General of India (DCGI) **Dr V G Somani** by another three months. The extension will come into effect from 15 November 2022.

He was earlier given an extension in August this year for three months. His extended term was to expire on 15 November 2022.

Dr Venugopal Girdharilal Somani played a key role in the approval of covid-19 vaccine, approval of lifesaving drugs and ensuring its quality in combating the covid-19 pandemic.

About DCGI (Drugs Controller General of India)

The Drugs Controller General of India is the head of the **Central Drugs Standard Control Organisation** under the Union Ministry of Health and Family Welfare.

Under the Drugs and Cosmetics Act, CDSCO is responsible for approval of Drugs, Conduct of Clinical Trials, laying down the standards for Drugs, control over the quality of imported Drugs in the country

Drugs Controller General of India: **Venugopal Girdharilal Somani**

Headquarters: **New Delhi**

7. Union Minister Arjun Ram Meghwal inaugurates international travelling Exhibition “Vaccines Injecting Hope” (Nov. 15, 2022)

“Vaccines Injecting Hope”

Union Minister of State for Culture & Parliamentary Affairs **Ajun Ram Meghwal** inaugurated an international travelling exhibition **“Vaccines Injecting Hope”** at the National Science Center, New Delhi on 15 November 2022.

The exhibition “Vaccines Injecting Hope” has been organised by the **National Council of Science Museums (NCSM)** and **Science Museum Group, London**.

The exhibition tells the story of the global effort to develop covid vaccine started on 15 November 2022 and will tour five cities of Delhi, Nagpur, Mumbai, Bengaluru and Kolkata till September 2025 and is expected to reach out to more than 2 million people.

The exhibition has sections on ‘The Arrival of New Virus’, ‘Designing a New Vaccine’, ‘Trials, Results and Approvals’, ‘Scaling Up and Mass Production’, ‘Vaccine Rollout’, ‘Living with COVID’.

Novel Coronavirus or Covid-19

The novel coronavirus was first detected in **Wuhan**, China in December 2019 and was later declared a Public health emergency of International concern by the World Health Organisation on 30 January 2020 and a Pandemic on 11 March 2020.

The **first case** of the virus in India was confirmed in **Kerala** on 30 January 2020.

Bharat Biotech, Indian Council of Medical Research and National institute of Virology, Pune developed an indigenous corona vaccine called **Covaxin**.

The Covid vaccination in India was started on **16 January 2021**.

National Council of Science Museums (NCSM)

It is an autonomous body under the Union **Ministry of Culture**. It is a premier body in the field of science communication.

It popularizes Science and Technology through a network of science centers, Mobile Science Exhibitions (MSE) units that visit rural schools and organise various activities for public and students in particular.

Headquarters: **Kolkata, West Bengal**

8. Jitendra Singh dedicates first Indian Biological Data Center to the nation (Nov. 15, 2022)

Jitendra Singh dedicates first Indian

Union Minister of state for Science and Technology, Jitendra Singh dedicated **India's first national repository for life science data 'Indian Biological Data Center' (IBDC)** to the nation on 10 November 2022 at **Faridabad**.

About Indian Biological Data Center

- In this data centre Indian researchers will store biological data from **publicly funded research**.
- The digitised data will be stored on a four-petabyte supercomputer called '**Brahm**'. A **petabyte** equals 10,00,000 **gigabytes** (gb).
- The government has mandated that data on all publicly funded research should be stored in this central repository.
- It will not only provide researchers a platform to securely store their data within the country, but also provide access to a large database of indigenous sequences for analysis.
- The Bio-Bank currently accepts **nucleotide sequences** to digitise the genetic of **humans, plants, animals and microbes**.
- The bio-bank now has 200 billion base pair data, including 200 human genomes sequenced under the '**1,000 Genomes Project**', an international effort to map genetic variations in people.
- The project will also focus on populations that are vulnerable to certain diseases.

9. India announces additional contribution of '\$ 5 million' to ASEAN-India science and technology fund (Nov. 12, 2022)

India announces additional contribution of '\$ 5 million

The Vice President [Jagdeep Dhankhar](#) on 12 November 2022 announced an additional contribution of **USD 5 million** to the **ASEAN-India Science and Technology Fund (AISTDF)** to enhance cooperation in sectors of public health, renewable energy and smart agriculture.

The announcement came during the three-day visit of Vice President Jagdeep Dhankhar to Cambodia for ASEAN-India and East Asia summits.

ASEAN India S&T Development Fund (AISTDF)

ASEAN-India Science & Technology Collaboration formally started in 1996 with the establishment of the ASEAN India S&T working group (AIWGST).

Initially, the collaborative S&T projects and activities between India and ASEAN were supported through ASEAN India Fund (AIF).

In 2008, a dedicated ASEAN India S&T Development Fund (AISTDF) with an equivalent amount of USD 1 million was established jointly by the **Ministry of External Affairs** and **Department of Science and Technology (DST)** to support Research and Development projects and associated project development activities.

The AISTDF was enhanced to an equivalent amount of USD 5 million through an announcement by the Prime Minister of India on the sidelines of the ASEAN-India Summit in Malaysia in November 2015.

10. Google launches 'FloodHub', a platform to forecast flood (Nov. 11, 2022)

'FloodHub', a platform to forecast flood

In November 2022, **Google** launched a platform called '**FloodHub**' to forecast floods. In this context, Google has expanded its AI flood forecasting services, which were first introduced in 2018 to an additional 18 countries in India, Africa, Latin America and Southeast Asia.

Important Facts:

- The company also launched '**FloodHub**', a platform that displays flood forecasts and shows when and where floods are likely to occur, so that people at risk can be directly informed of their needs and officials can help them effectively. be able to assist.
- In 2018, the company launched its Flood Forecasting Initiative to help combat the devastating damage caused by floods.
- The company has expanded its wildfire monitoring program to a few more countries after launching it in the US.
- Using new AI models based on satellite imagery, the company detects the extent of wildfires and searches and shows their real-time location in a map.
- Google said that since July, we've covered more than 30 major wildfire incidents in the US and Canada, helping people and fire teams search and view Maps more than 7 million times.
- Wildfire detection is now available in the US, Canada, Mexico and parts of Australia.

Google:

- Founders: **Larry Page, Sergey Brin;**
- Parent Organization: **Alphabet Inc.;**
- Established: **4 September 1998;**
- Headquarters: **Mountain View, California, United States;**
- CEO: **Sundar Pichai;**