World Intellectual Property Organisation (WIPO) highlighted surge in Intellectual Property (IP) filings in India

India's **patent applications** have more than **doubled in a decade, trademarks increased 2.5-fold & design filings grew** over **threefold.**

Types of IPR

- **Patent:** It is an **exclusive right granted for an invention** for a limited period of time, generally 20 years.
- **Trademark:** It is a **sign capable of distinguishing goods or services** of one enterprise from those of other enterprises.
- **Industrial Design:** It constitutes the **aesthetic or ornamental aspect** of a product.
- **Geographical Indication:** Sign used on products that possess qualities or reputation due to a specific geographical origin.
- **Copyright:** Rights that creators have in their literary, artistic and scientific works.

Global treaties & protocol for IP Rights (IPR) filing

- **Patent Cooperation Treaty (PCT), 1970:** It is an international treaty **under aegis of WIPO,** with **158 Contracting States including India.**
  - ⊕ It seeks **patent protection for an invention simultaneously in each of the member countries** by filing single international patent application.
- **Madrid Protocol for Trademark Registration, 1989:** Establishes **Madrid System,** administered by WIPO, for **registering and managing trademarks worldwide.**
  - ⊕ It has **115 members,** covering 131 countries, including **India.**
- **Hague Agreement Concerning the International Registration of Industrial Designs 1925:** Establishes **Hague System,** allowing industrial designs to be protected in multiple countries or regions.
  - ⊕ **India is not a member.**

World Health Organization (WHO) announces new Collaborating Centre on AI for Health Governance

WHO designated the **Digital Ethics Centre at Delft University of Technology in the Netherlands** as a WHO Collaborating Centre on **Artificial Intelligence (AI) for Health Governance.**

- It will be instrumental in WHO's efforts to ensure the **ethical and responsible use of AI for health** by advancing research on priority topics and providing expert input for policy-making.

AI in Healthcare

- **Predictive modelling:** Analysis of patients' medical history, genetic information etc. **to predict susceptibility to certain diseases** or progression of existing conditions.
- **Research and Development:** Accelerated drug and vaccine discovery with **planning and execution of targeted clinical trials.**
- **Disease Diagnosis and Monitoring:** Patient screening, accurate **medical image recognition and precision medicine.**
- **Care Economy:** Help **manage ageing** through virtual assistant chatbots, pattern recognition and utilizing advancements in preventive healthcare.

Challenges to AI in healthcare

- **Data security and privacy issues:** AI in healthcare generates and stores vast amounts of sensitive personal and **medical information, making data security a concern.**
- **Algorithmic bias:** Risks **increasing disparities** through reinforcement of existing biases for certain individuals or groups.
- **Fragmented regulatory framework:** Lack of clear regulation and rising public distrust in AI raises the question of **fixing responsibilities.**

WHO consensus ethical principles for use of AI for health

- Protect autonomy
- Promote human well-being, human safety and the public interest
- Ensure transparency, explainability and intelligibility
- Foster responsibility and accountability
- Ensure inclusiveness and equity
- Promote AI that is responsive and sustainable

UNESCO released a report titled Languages matter: Global guidance on Multilingual Education

The report is compiled on the **25th anniversary of International Mother Language Day (21 Feb)**, celebrating a quarter-century of dedicated efforts to **preserve and promote the use of mother tongues.**
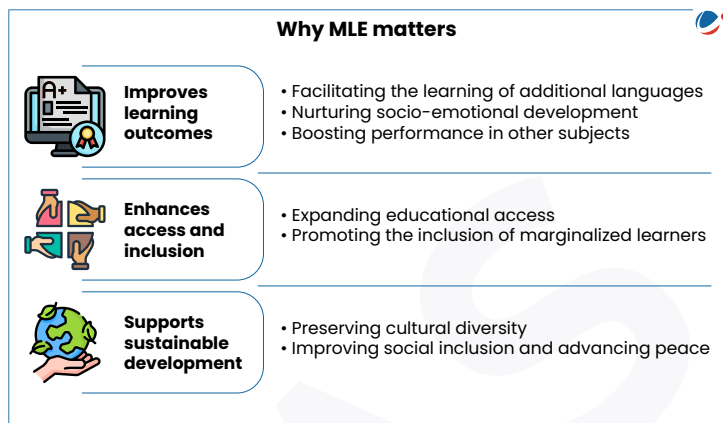
Key Findings of the Report

» Nearly **40% of the global population does not have** access to education in a language they speak or understand.
  - ⊖ In some low and middle-income countries, **this figure reaches 90%.**
» **India ranks fourth in the list of top ten** countries with the most spoken languages.

About Multilingual Education

» UNESCO defined multilingual education (MLE) as the **use of at least three languages, the mother tongue, a regional or national language, and an international language in education.**
  - ⊖ **India's New Education Policy, 2020** also promotes **three language formula.**
» **UNESCO's World Atlas of Languages estimates** that there are **8,324 languages,** spoken or signed.

Key Challenges in Multilingual Education

» **Resource constrain:** Insufficiently trained teachers, a shortage of multilingual learning and teaching material.
» **Policy opposition:** particularly from those prioritizing national or international languages over local languages.
» **Other:** Historical factors (often from colonialism), etc.

Why MLE matters

Improves learning outcomes
- Facilitating the learning of additional languages
- Nurturing socio-emotional development
- Boosting performance in other subjects

Enhances access and inclusion
- Expanding educational access
- Promoting the inclusion of marginalized learners

Supports sustainable development
- Preserving cultural diversity
- Improving social inclusion and advancing peace

Key Recommendations

» **Develop culturally-responsive** and **contextually** appropriate learning materials in learners' Languages
» **Integrate robust monitoring** and **evaluation systems**
» Conduct a **situational analysis** of the **sociolinguistic and educational context** to guide effective policy design

Indian telecom companies Airtel and Jio inks pact with SpaceX to bring Starlink's satellite internet services to India

Starlink is the **world's first and largest satellite constellation that uses Low Earth Orbit** (LEO) to provide high-speed, low-latency broadband internet.

Satellite Internet

» It is a **wireless internet through communication satellites** orbiting the Earth and is location independent, providing global coverage.
» Satellites communicate with each other using **lasers,** reducing dependence on **ground stations.**
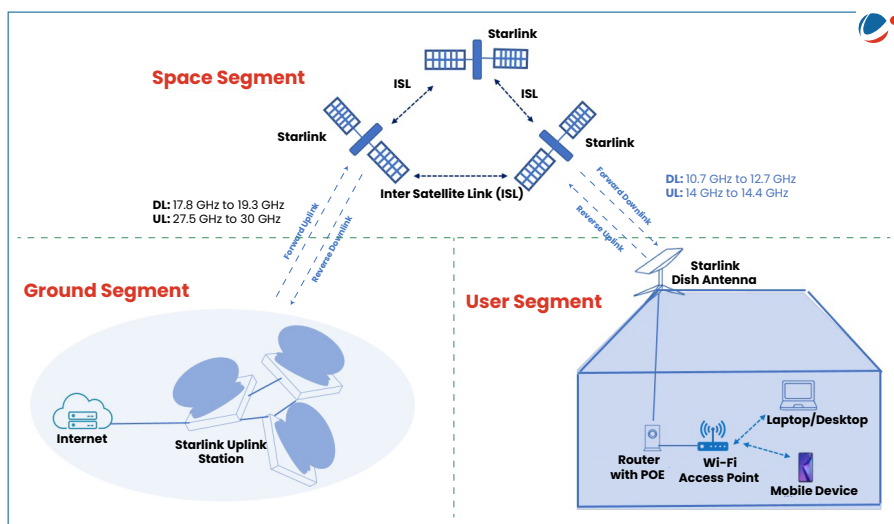
Starlink Satellite Internet Service

» Presently, there are around **7,086 starlink satellites** in orbit.
» **Each starlink satellite:**
  - ⊖ Contains **3 space lasers** (Optical Intersatellite Links or ISLs) operating at up to 200 Gbps, which together across the constellation form a global internet mesh.
  - ⊖ Uses **5 advanced Ku-band phased array antennas and 3 dual-band (Ka-band and E-band) antennas** to provide high-bandwidth connectivity.

Significance of Satellite Internet

» **Improving access:** Suited for **unconnected areas** or areas with **unreliable connectivity.**
» **Connectivity during Disasters:** Starlink provided connectivity to Tonga after a **massive volcano eruption and tsunami.**
» **Military applications:** Provides connectivity between military **bases and military planes, ships, drones etc.**

Concerns

» **Astronomical Interference:** Bright light emitted by satellites in the night sky **could interfere with astronomical observations.**
» **Atmospheric changes:** Plan to steering out of service starlink satellites into Earth's atmosphere risks **altering the atmospheric chemistry.**
» **Technical limitations:** Disruptions by extreme weather conditions and geomagnetic storms.

Space Segment — Starlink — ISL — Inter Satellite Link (ISL)
DL: 17.8 GHz to 19.3 GHz / UL: 27.5 GHz to 30 GHz
DL: 10.7 GHz to 12.7 GHz / UL: 14 GHz to 14.4 GHz
Forward Uplink / Reverse Downlink / Forward Downlink / Reverse Uplink
Ground Segment — Internet — Starlink Uplink Station
User Segment — Starlink Dish Antenna — Router with POE — Wi-Fi Access Point — Laptop/Desktop — Mobile Device

Immigration and Foreigners Bill, 2025 introduced in Lok Sabha

The Bill seeks to **streamline various services** related to **immigration** and **foreigners,** including their entry, exit and stay in the country.

- This bill repeals four existing laws **Foreigners Act, 1946, Passport (Entry into India) Act** (1920), **Registration of Foreigners Act** (1939), and **Immigration (Carriers' Liability) Act (2000)** which governs the services related to immigration and foreigners (refer to box).
- Three of these laws are from the **pre-Constitution period** brought during extraordinary times of **World Wars I and II.**

Key provisions of the Bill

- **Grounds for Denying Entry or Stay:** Foreigners can be denied entry if deemed a **threat to national security,** sovereignty, public health, or foreign relations.
  - **Immigration Officers** decisions will be final and binding.
- **Tracking of Foreigners:** Institutions such as **educational establishments, hospitals, and nursing homes** will be required to report foreign nationals to immigration authorities.
- **Other: Stricter Penal Provisions** (E.g. 5 years imprisonment or ₹5 lakh fine for entering India without valid documents)

Existing Governance Related Immigration and Foreigners

- **Registration of Foreigners:** Foreigners (including **Indian origin**) visiting India on the following **long-term visas** (more than **180 days**) must register with the **Foreigners Regional Registration Officer.**
- **Visa regulations: Bureau of Immigration (BoI)** grants electronic visas to countries.
  - The BoI was set up in 1971 under the **Ministry of Home affairs.**
- **Immigration (Carriers' Liability) Act, 2000:** Makes carriers responsible for passengers violating the **Passport Act.**
- **Citizenship Act, 1955:** Regulates acquisition and registration of foreigners as **Overseas Citizens of India (OCI).**

Indian Prime Minister (PM) handed over Overseas Citizen of India (OCI) card to Mauritius counterpart

Earlier in 2024, **OCI cards were extended to 7th generation of Indian diaspora** in Mauritius.

- OCI cards are provided under the **OCI Card Scheme.**

About OCI card Scheme

- It was introduced by **amending the Citizenship Act, 1955** in **2005.**
  - In 2015, the **Person of Indian Origin (PIO) card** scheme was merged with it, and all PIO cardholders were deemed to be OCI cardholders.
- **Eligibility criteria for OCI card**
  - Who was a **citizen of India at the time of, or at any time after 26th January, 1950;**
  - **Eligible** to become a citizen of India **on 26th January, 1950 or belonged** to a territory that became part of India after **15th August, 1947;** etc.
  - **Exceptions: No person, who or either of whose parents or grandparents had been a citizen of Pakistan, Bangladesh** or such other country as the government may specify.

Benefits enjoyed by OCI cardholders

- **Multiple entry, multi-purpose lifelong visa** to visit India.
- **Exemption from reporting to Police authorities** for any length of stay.
- **Parity with NRIs in financial, economic and educational fields** except in the acquisition of **agricultural** or **plantation properties.**

Non entitlement to OCI cardholders

- Don't enjoy Political right to vote.
- Can't become member of legislative assembly or parliament or hold any constitutional office, etc.
- Requires Protected Area Permit (PAP) to visit any place which falls within the Protected or Restricted Area, etc.

Also In News

UAPA, 1967

The Ministry of Home Affairs (MHA) declared the Jammu and Kashmir-based organization as **unlawful associations under the Unlawful Activities (Prevention) Act, 1967,** imposing a five-year ban on the organization.

About Unlawful Activities (Prevention) Act, 1967

- **Origin:** Introduced as the **Unlawful Activities (Prevention) Ordinance, 1966,** in response to secessionist movements like the Naxalbari uprising.
- **Objective:** It provides for effective prevention of certain unlawful activities of individuals and associations and for dealing with terrorist activities.
- **2019 amendment added key provisions:**
  - Director General of National Investigation Agency (NIA) can now approve seizure of terrorist-linked properties, expediting investigations.
  - **Central Government** can designate **individual terrorist**

Parvatmala Pariyojana

Cabinet Committee on Economic Affairs (CCEA) has **approved Kedarnath and Hemkund Sahib ropeway projects in Uttarakhand** under the National Ropeways Development Programme – Parvatmala Pariyojana.

About Parvatmala Pariyojana

- **Launched:** Union budget **2022-23.**
- **About:** Aims to develop over **250 ropeway projects** in five years **under PPP mode.**
- **Ministry:** Implemented by **Ministry of Road Transport and Highways** (MORTH) through **National Highways Logistics Management Limited** (NHLML).
- **Benefits of ropeways:**
  - Multiple cars propelled by a single power-plant and drive mechanism, **reducing both construction and maintenance costs.**
  - Can **handle large slopes and large differences in elevation.**

Venture Capital

India's Venture Capital (VC) funding surges by **43% to $13.7 billion in 2024.**

About VC

- It is a form of **private equity and a type of financing for startup companies** and small businesses with **long-term growth potential.**
- Venture capital usually **takes the form of equity shares** or a future claim on equity, such as convertible debt, which in return allows the venture capital firm to receive a **share of ownership in the business.**
- Venture capitalists provide backing through **financing, technological expertise, or managerial experience.**

Chagos Archipelago

India has supported Mauritius in its stance **on sovereignty over Chagos archipelago.**

- Chagos archipelago has been **under British control since 1814** when they were ceded to Britain with Mauritius.
- It was constituted as British Indian Ocean Territory in 1965 and kept under British control even after **Mauritius's independence in 1968.**
- In 2024, UK and Mauritius signed an agreement to return **sovereignty of Chagos archipelago to Mauritius.**

About Chagos archipelago

- It is a group of atolls comprising **58 islands,** located in Indian Ocean.
- Its largest atoll – **Diego Garcia** – hosts a major US military base.

75/25 Initiative

As of now, the 75/25 initiative has **achieved 89.7% of its target,** providing **treatment for hypertension** to 42.01 million individuals and **treatment for diabetes** to 25.27 million individuals.

About 75/25 Initiative

- **Launched:** On World Hypertension Day 2023.
- **Aim:** To **provide standardized care to 75 million individuals** living with **hypertension and diabetes** by **December 2025** through Primary Health Centres (PHCs).
- It utilizes the strategies under **National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD).**

Bills of Lading Bill, 2025

Lok Sabha Passed the **Bills of Lading Bill, 2025.**

About the Bills of Lading Bill, 2025

- It will replace the colonial-era **Indian Bills of Lading Act, 1856.**
- It **empowers the Central Government** to issue implementation directives.
- It also includes **a standard repeal** and **saving clause** to **eliminate colonial elements.**

Need of New Bill

- Supports India's growing role in global trade by **simplifying shipping processes and reducing disputes.**
- **Streamlines business processes** and reduces litigation risks.
- Provides clarity for **carriers, shippers, and lawful goods holders.**

Gene-edited Bananas

Recently, a **UK based biotech company** has developed **gene-edited bananas** which are **less likely to turn brown** when **bumped during harvesting** and **transportation.**

Browning process of Bananas

- Bananas boast a colourful life cycle, they start at a deep green, change to bright yellow, and end at an unappetising brown.
- These changes are a **product of their ripening process,** which is **caused by a hormone** called **ethylene.**
- **Ethylene triggers** the activity of **genes linked to the production of enzyme polyphenol oxidase (PPO),** responsible for turning bananas brown.
  - In gene-edited bananas, **genes linked with PPO** have been **silenced.**

Large Phased Array Radar (LPAR)

China has reportedly deployed a new **Large Phased Array Radar (LPAR)** in Yunnan province near the Myanmar border, significantly enhancing its surveillance capabilities over India.

- LPARs can **track multiple targets** including ballistic missiles, with high precision, playing a critical role in **early warning system and air defence networks.**
- Unlike traditional radars, which rely on mechanical rotation, LPARs use **electronically controlled antennas** to scan vast areas almost instantly.
- Besides China, **only the US and Russia** operate similar LPAR systems.

Place in News   📰 Armenia (Capital: Yerevan)

India signed a MoU with Armenia for cooperation in field of medical products regulation.

Political Features

- **Location:** Landlocked country of **Transcaucasia** (populated region to the south of the Caucasus Mountains).
- **Border:** Azerbaijan, Turkey, Nakhchivan Autonomous Republic (an exclave of Azerbaijan), Georgia, and Iran.
  - **Nagorno-Karabakh,** Ethnic Armenian enclave in **Azerbaijan,** source of conflict since **1988** have been recently resolved.

Geographical features

- **Highest Peak:** Mount Aragats (Alaghez)
- **Rivers:** Aras River

AHMEDABAD   BENGALURU   BHOPAL   CHANDIGARH   DELHI   GUWAHATI   HYDERABAD   JAIPUR   JODHPUR   LUCKNOW   PRAYAGRAJ   PUNE   RANCHI