

NEWS TODAY

India's first quantum computer set for launch under National Quantum Mission (NQM)

Goal of mission is to establish a quantum computer with a capacity of 20-50 qubits in next three years, 50-100 qubits in next five years and 50-1000 qubits in next 10 years.

➤ Four companies (under Companies Act, 2013) & a grant for start-ups will also be set up for achieving objectives of NQM.

About NQM

➤ **Aim:** To scale up scientific and industrial R&D and create innovative ecosystem in Quantum Technology.

➤ **Implementing agency:** Department of Science & Technology under Ministry of Science & Technology.

➤ **Mission duration:** 2023 to 2031.

➤ **Mission objectives:**

⊕ **Quantum Communication Network:** Secure and high-bandwidth communication infrastructure spanning 2,000 kilometers.

◆ Also, inter-city quantum key distribution (QKD) is over 2000 km.

◆ QKD enables future-proof security of communication networks using quantum mechanics.

⊕ **Quantum Computing Power:** Developing quantum computers with a processing capacity of 50-1,000 qubits.

◆ Qubit is a fundamental unit of information in quantum computing.

⊕ **Developing Magnetometer (used for measuring strength and direction of magnetic fields) and Atomic Clocks:** For precision measurements.

⊕ **Quantum Materials Design:** For cutting-edge device fabrication.

➤ **Establishing four Thematic Hubs:** Quantum Computing, Quantum Communication, Quantum Sensing & Metrology, and Quantum Materials & Devices.

Significance of NQM:

➤ **Developing Innovation Ecosystem:** By establishing thematic hubs fostering collaboration and expertise across diverse sectors

➤ **Applications in Different sectors** e.g. Healthcare and drug discovery, Finance and banking industries etc.

➤ **Global Leadership:** By developing Secure Communication, Precision Measurement etc.

Challenges in NQM:

➤ Poor Expenditure on Research, Lack of Private Investment, Delayed progress of NQM, Lack of Skilled Workforce, Lack of Availability of Infrastructure etc.

Pradhan Mantri Jan Dhan Yojana (PMJDY) - National Mission for Financial Inclusion completes Ten Years

PMJDY was launched in 2014 under Ministry of Finance to ensure access to financial services, namely, Basic Savings Bank Account (BSBD), remittance, credit, insurance, pension in an affordable manner.

Key features of PMJDY

➤ **BSBD account can be opened in any bank branch or Business Correspondent (Bank Mitra) outlet**, by persons not having any other account.

➤ Focus on every unbanked adult.

➤ **Free accidental insurance cover on RuPay cards increased** from Rs. 1 lakh to Rs. 2 lakhs for PMJDY accounts after 28.8.2018.

➤ **Rs 10,000 Overdraft (OD) facilities and upper age limit for OD is 65 years.**

➤ PMJDY accounts are eligible for **Direct Benefit Transfer, Pradhan Mantri Jeevan Jyoti Bima Yojana, Pradhan Mantri Suraksha Bima Yojana, Atal Pension Yojana, Micro Units Development & Refinance Agency Bank scheme.**

Key-achievements under PMJDY

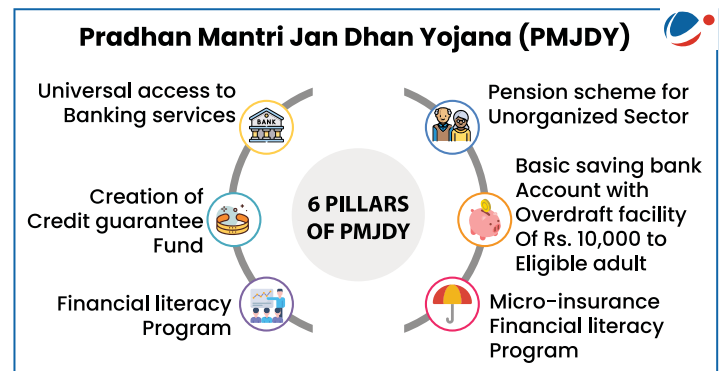
➤ By July 2024, **52.74 crore** Jan Dhan accounts were opened.

⊕ **More than 55%** accounts holders are women.

➤ Almost 100% of villages are covered with **banking outlets** within 5 km mapped as per Jan Dhan Darshak App.

➤ **Average Deposit in PMJDY accounts increased** by 4.12 times between 2015- 2024.

➤ **Number of zero balance accounts decreased** to 4.26 crores as against 8.52 crores in March 2015.



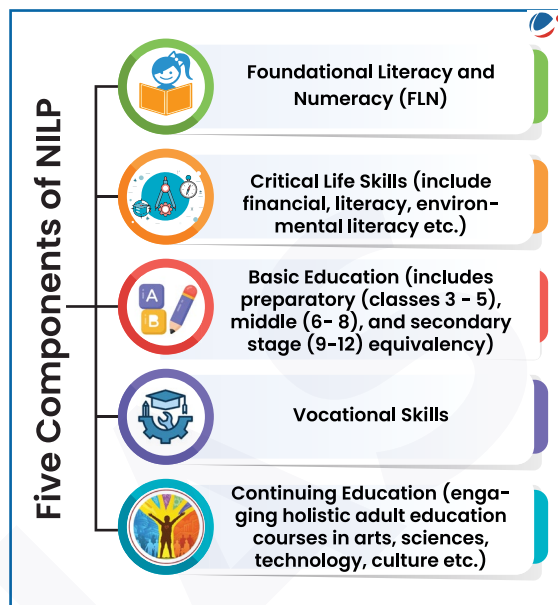
Ministry of Education (MoE) defines Literacy and Full Literacy under New India Literacy Programme

To support adult education/literacy as emphasized in **NEP 2020** and **SDG 4.6** (ensuring all youth and adults achieve literacy and numeracy by 2030), it is essential to define both Literacy and Full Literacy.

- **Literacy:** Ability to **read, write, and compute with comprehension**, i.e. to identify, understand, interpret and create along with critical life skills like digital and financial literacy etc.
- **Full Literacy (To be considered equivalent to 100% literacy):** Achieving 95% literacy in a State/UT that may be considered as equivalent to fully literate.

About New India Literacy Programme (NILP)

- Also known as **ULLAS (Understanding of Lifelong Learning for All in Society)**.
- **Launched by MoE**, it is a **Centrally Sponsored Scheme**.
- **Tenure: FYs 2022-27** (5 years).
- **Objective:**
 - ⊕ **Targets all non-literates of age 15 years and above**, with more focus on **females and educationally backward states**.
 - ⊕ **Target 5 crore learners (1 crore per year)** by using **“Online Teaching, Learning and Assessment System (OTLAS)”** in collaboration with National Informatics Centre, NCERT and NIOS.
- **Implemented through volunteer teachers**, students of schools and Higher Education Institutions and Teacher Education Institution.
- It is **in alignment** with recommendations of **NEP 2020**.
- **Need:** Absolute number of non-literates in 15 years and above age group is 25.76 crore (**Census 2011**).



2nd round of India-Singapore Ministerial Roundtable (ISMR) held in Singapore

Both countries **deliberated upon six pillars** identified under Roundtable (Digitalization, skill development, sustainability, health-care, advanced manufacturing and connectivity).

About ISMR:

- **Inaugural Session:** Held in New Delhi in **September 2022**.
- **Objective:** Review various aspects of **Strategic Partnership** and identify **new avenues of cooperation** for India-Singapore bilateral relations.

India-Singapore bilateral relations:

- **Framework of Relationship:** Key agreements include Comprehensive Economic Cooperation Agreement (**CECA**) (**2005**), Double Taxation Avoidance Agreement (**1994**); **Mutual Legal Assistance Treaty (2005)** etc.
- **Economy:**
 - ⊕ Singapore is **largest source** of foreign direct investment (2023-24) & **sixth** largest global trade partners (2023-24).
 - ◆ **Top sectors of FDI:** Services Sector, Computer Software & Hardware, Trading, Telecommunications etc.
- **International forums:** Both are members of forums like East Asia Summit, G20, Commonwealth, **IORA** (Indian Ocean Rim Association), and **IONS** (Indian Ocean Naval Symposium).
- **Defense: Military Exercises** like SIMBEX, Bold Kurukshetra etc.
- **Diaspora:** Ethnic Indians constitute about **9.1 % of resident population**. Tamil is one of **four official languages** of Singapore.
 - ⊕ **ASEAN-India Pravasi Bharatiya Divas (PBD)** was held in Singapore in 2018 as part of commemoration of **25 years of ASEAN-India Partnership**.
- **Science & Technology:**
 - ⊕ In 2023, ISRO successfully launched the **PSLV-C55 mission** carrying two Singapore satellites.



India and United States (US) signed agreements to deepen Defence Cooperation

These include

- **Security of Supplies Arrangement (SoSA):** Allows both U.S. and its partners to request priority support for defence-related goods and services to maintain supply chain resilience during critical times.
 - ⊕ SoSA is not legally binding and not sanction-proofed. India is 18th SoSA partner of US.
- **Memorandum of Agreement regarding Assignment of Liaison Officers:** It will increase sharing of information and will entail posting of Indian armed forces officers in key strategic US Commands.

Other initiatives to boost India-US Defence and Security Co-operation

- **US designated India as a Major Defence Partner (2016), and signed foundational agreements i.e.**
 - ⊕ **Logistics Exchange Memorandum of Agreement (LEMOA), 2016** to use each other's military base.
 - ⊕ **Communications Compatibility and Security Agreement (COMCASA), 2018** for interoperability between two militaries and sale of high-end technology to India.
 - ⊕ **Basic Exchange and Cooperation Agreement (BECA), 2020** to share high-end military technology, logistics and geospatial maps.
- **Initiative on Critical and Emerging Technologies (iCET, 2023):** Framework for technology cooperation, it covers commercial as well as defence technologies.
- **India-US Defence Acceleration Ecosystem (INDUS-X, 2023):** Coordinate efforts in defence innovation in technology, systems and products.



Union Government issues Comprehensive Guidelines for Effective Redressal of Public Grievances

Department of Administrative Reforms and Public Grievance has reviewed existing processes to make **Centralised Public Grievance Redress and Monitoring System (CPGRAMS)** sensitive & accessible to citizens through these guidelines.

Key highlights of Guidelines

- **Appointment of Nodal Officers:** In each Ministry/Department for efficient grievance handling.
- **Dedicated Grievance Cells:** In every Ministry/ Department with sufficient resources.
- **Feedback and appeal system:** Feedback on disposed grievances is collected through SMS, email, and a call center. If unsatisfied, citizens can file appeal to senior authority.
- **AI-powered analysis:** To analyze citizen feedback.
- **Training and Capacity building:** Of grievance officers on CPGRAMS shall be conducted under SEVOTTAM scheme.

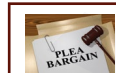
About CPGRAMS:

- It's a **common open platform for registration of complaints** by the citizens on any issue against any public authority in the Central Government or States/ UT.
- **Genesis:** By the Department of Administrative Reforms and Public Grievances in 2007.
- **Achievements:**
 - ⊕ CPGRAMS portal has redressed nearly **60 lakh Public Grievances** in period 2022-2024.
 - ⊕ Timelines for effective grievance redressal have been reduced to **21 from 30 days**.
- Earlier in 2022, Government implemented **10-step reforms of CPGRAMS** e.g. Universalization of CPGRAMS 7.0; Automatic flagging of urgent grievances, **leveraging AI/ML**, etc.

Other Initiatives Taken for Grievance redressal:

- **Pro Active Governance and Timely Implementation (PRAGATI) platform by MeiTY** is an interactive, ICT-based platform that addresses grievances from the common person.
- **Integrated Grievance Redressal Mechanism (INGRAM) portal** launched by Department of Consumer Affairs to address consumer grievances.
- **Sevottam Service Delivery Excellence Model** has been developed by DARPG in 2006 with objective of improving quality of public service delivery in country.

Also in News



Plea Bargaining

As per the Ministry of Law and Justice, only 0.11% of cases were resolved through plea bargaining in 2022.

About Plea Bargaining:

- It is an **agreement between defense and prosecution** where accused pleads guilty for a lesser offense or a reduced sentence.
- **Introduced in 2006** as part of a set of amendments to CrPC.
- In section 290 of Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS), **plea bargaining** has been made **time bound and application can be made within 30 days** from date of framing of charge.
- **Application:** Applies only to offenses punishable by up to seven years of imprisonment, with further restrictions **excluding** cases involving crimes against women, children, or socio-economic offenses.



Unified Lending Interface (ULI)

Reserve Bank of India to launch ULI.

About ULI

- It is a technology platform which would **enable frictionless credit**.
- It will facilitate a **seamless and consent-based flow of digital information**, including **land records of various states**, from multiple data service providers to lenders.
- It will have a **common and standardised Application Programming Interface** designed for a 'plug and play' approach.

Benefits of ULI

- Enables borrowers to get **benefit of seamless delivery of credit, quicker turnaround time** without **requiring extensive documentation**.
- Addresses **credit demand gaps for agriculture and MSME sectors**.



New Districts in Ladakh

The Union Ministry of Home Affairs (MHA) announced the creation of five new districts in **Union Territory** of Ladakh.

- These districts are **Zaskar, Drass, Sham, Nubra and Changthang**.
- ⊕ Currently, Ladakh has only two districts: **Leh and Kargil**.

How Are Districts Created?

- **State government** has power to create new districts or alter or abolish existing ones in states.
- ⊕ Changes can be made by **passing an executive order or a law in state assembly**.



Prime Minister's Wi-Fi Access Network Interface (PM-WANI)

As per TRAI, there are **2,07,642 deployed PM-WANI Wi-Fi hotspots in country** as on 22.07.2024, far short of 10 million public Wi-Fi hotspots by 2022 and 50 million by 2030.

About PM- WANI

- Launched by **Department of Telecommunication** in 2020.
- Aims to **enhance the proliferation of public WiFi hotspots** to create robust digital communications infrastructure in country, especially in rural areas.
- **Encourages local shops** and establishment to **provide Wi-Fi for last-mile internet delivery** which does **not require a licence or charge a registration fee**.
- **Consists of four parts:** Public Data Office, Public Data Office Aggregator, App Provider, and Central Registry.



Wular Lake

Measures are being taken for cleaning siltation of critically silted Wular Lake.

About Wular Lake:

- **Largest freshwater lake** in India and **second largest freshwater lake in Asia** situated on foothills of **Haramuk Mountain (J&K)**.
- ⊕ Main source of water is **River Jhelum**.
- **Zaina Lank:** Small island in lake constructed by **King Zainul-Abi-Din**.
- **Ramsar Site:** It was designated as Wetland of International Importance under **Ramsar Convention**.
- **Site for migratory waterfowl species:** Little Egret, Cattle Egret, Common Pochard etc.
- **Major problems:**
 - ⊕ Pollution from **fertilizers, animals & human wastes**, conversion of vast catchment into **agricultural land** and hunting pressure on waterfowl and migratory birds



Hoolock Gibbon

Assam allows for oil and gas exploration in **Hollongapar Gibbon wildlife sanctuary**.

About Hollongapar Gibbon Wildlife Sanctuary (Jorhat, Assam)

- **Contains India's only gibbons** (hoolock gibbons), and **North-eastern India's only nocturnal primate** (Bengal slow loris).
- **Only sanctuary in India to be named after gibbons** as it contains largest density of gibbons.

About Hoolock Gibbon

- **Only ape found in India** (in northeast).
- **Western hoolock gibbon:** Found in **all states of north-east**, restricted between south of Brahmaputra river and east of Dibang river; Eastern Bangladesh and north-west Myanmar.
 - ⊕ **IUCN Status:** Endangered.
 - ⊕ **Schedule 1 of WPA, 1972.**
- **Eastern hoolock gibbon:** Specific pockets of Arunachal Pradesh and Assam in India, and southern China and north-east Myanmar.
 - ⊕ **IUCN Status:** Vulnerable.



Mass wasting

Environmental scientists raised concern in a new study on high frequency of mass wasting events in **Sedongpu Gully of Tibetan Plateau** since 2017.

About Mass wasting

- **A geological event**, mass wasting is the **gravity-influenced movement** of rock and soil down a slope.
- ⊕ **Rapid earth movements** triggered by rain or seismic activity **E.g., Rock falls, slumps, and debris flows.**

About Sedongpu Gully

- Located in **Tibetan Plateau** near **Arunachal Pradesh Border**.
- It's found in **catchment of the Sedongpu glacier** and its valley.
- It drains into **Yarlung Zangbo or Tsangpo river**.



Leptospirosis (Rat Fever)

A surge in **Leptospirosis** cases has affected almost all districts in Kerala.

About Leptospirosis

- Infectious disease caused by **pathogenic bacteria called leptospire** that are **transmitted directly or indirectly from animals to humans**. Thus, it is a **zoonotic disease**.
- Bacteria enter body through cuts or abrasions on skin.
- **Human-to-human transmission** occurs **very rarely**.
- Most common in **tropical and subtropical areas with high rainfall**.
- **Initiative taken to control:** Programme for Prevention and Control of leptospirosis by Ministry of Health and Family Welfare.

Places in News



Sudan (Capital: Khartoum)

Dam collapses in eastern Sudan after heavy rainfall claims multiple lives.

Political features

- **Land Borders:** by **Egypt (north), Eritrea and Ethiopia (east), South Sudan (south), Central African Republic and Chad (west), and Libya (northwest)**.
- **Maritime Border:** **Red Sea (east)**.

Geographical features

- **Highest point:** **Deriba Caldera (Crater Lake)** at **Jebel Mara**.
- **Major Rivers:** **Nile, Tekeze** etc.
- **Climate:** **Varies from north to south. Northern part is a desert climate, receiving little rainfall, shifting to semi-arid and then tropical savannah towards south.**



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



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