

NEWS TODAY

PM urged for Democratization of Technology at G7 Outreach summit

Democratization of Technology (DoT) refers to process by which access to technology becomes more widespread among larger population.

- Some key facets of DoT include **accessibility, affordability, decentralization, skill development, shared resources**, etc.

Significance of DoT

- Economic:** Enables individuals and small businesses to leverage tech platforms to start new ventures, innovate, and compete in various sectors driving economic growth, job creation, and income opportunities.
- Social:** Bridge digital divides and provide access to educational resources, healthcare information, financial services, etc., enabling **social mobility**. e.g., **Massive Open Online Courses offered by NPTEL**.
- Cultural:** Social media platforms like Twitter and Instagram have given voice to diverse communities and enabled sharing of cultural content globally.
- Governance:** Facilitate greater citizen engagement, public discourse, and accountability in governance and decision-making processes. e.g., **Social Media outreach to public services beneficiaries**.

Challenges in DoT

- Digital divide and infrastructure gap:** e.g., Lack of reliable and affordable internet connectivity, particularly in remote and rural areas.
- Gender and social inequities:** Persistent gender disparities in access to education, employment, and resources exacerbates digital divide.
- Cybersecurity and privacy concerns:** Concerns about data privacy, online fraud, etc., can deter individuals and organizations from fully embracing tech.

Steps Taken for DoT in India

- Digital Public Infrastructure:** 'India Stack' created for digital identification, payments, and data management.
- Common Service Centres:** Access point for delivery of Government-to-Citizen (G2C) e-Services within the reach of citizens, by creating physical service delivery ICT infrastructure.
- NAMO Drone Didi Initiative:** To help Women SHGs purchase drones for farming purpose.
- India AI mission:** To democratize benefits of AI across all strata of society.

Prime Ministers review progress of India-Italy Strategic Partnership

Prime Ministers of India and Italy reviewed the progress on the sidelines of G7 Summit and agreed to strengthen cooperation in **global and multilateral initiatives**, including India-Middle East-Europe Economic Corridor (IMEC).

Key aspects of Bilateral Partnership

Political

- Political relations between the two countries were **established in 1947** which was **elevated to Strategic Partnership in 2023**.
- In a Virtual Summit in 2020, **2020-2025 Action Plan** was adopted that set an ambitious agenda for an enhanced Partnership between the countries.

Economic

- Italy is **India's 4th largest trading partner** in the EU, after Germany, Belgium, and Netherlands.
- Indo-Italian Joint Economic Commission Cooperation** has been in existence since 1976.
- Migration and Mobility Partnership Agreement** signed in 2023 to ensure **safe and legal migration**.

Technology

- New Science & Technology Co-operation Agreement** signed in **Nov 2003**, with **prime areas of joint research including Electronics, Biotechnology, Energy**, etc.
- New Executive Programme of Cooperation for 2025-27** to promote joint research and development in Science & Technology.

Defence and Security

- In 2023, **Italy joined Indo-Pacific Ocean Initiative's Science and Technology Pillar**.
- Joint Military exercises: PASSEX Exercise, MILAN (Naval Exercises)**.

Cooperation in Multilateral bodies

- Italy joined India-led **International Solar Alliance, Coalition for Disaster Resilient Infrastructure, Global Biofuels Alliance, and IMEC**.

Bengaluru Municipal body proposed to impose Solid Waste Management Cess

Bruhat Bengaluru Mahangara Palike (BBMP) has proposed a Solid Waste Management (SWM) Cess of ₹100 per month for each household.

- **Solid Waste Management Rules, 2016** enables Urban Local Bodies to levy **user fees or SWM cess**.
- Solid waste refers to the **byproducts of household or commercial activities** that have **lost their value to the original owner(s)** but **may hold significance for others**. e.g., Municipal solid waste (items discarded by households), industrial waste, etc.

Current state of SWM in India

- Solid waste generated stands at **160,038.9 tons per day**, out of which **~95% of waste is collected** in an efficient manner. (CPCB, 2020-21)
- Out of the total collected waste, **~50% undergoes some form of treatment** whereas **31.7% of the total waste generated remains unaccounted**.

Challenges in SWM in India

- **Segregation of waste:** Inadequate segregation of waste at source results in increased cost of waste disposal.
- **Collection and transportation:** Underdeveloped waste storage infrastructure at its source, limited door-to-door waste collection, etc.
- **Disposal and treatment:** Use of open dumps which emit methane gas as biodegradable waste decomposes in anaerobic conditions, contributing to fires, explosions, and global warming.
- **Municipal Finance:** Struggle to make enough money from the services they provide, challenges in attracting private capital on market terms due to inadequate creditworthiness, etc.

Key Provisions of Solid Waste Management Rules, 2016

- **Applicability:** Rules are applicable on Municipal areas, urban agglomerations, census towns, notified industrial townships, etc.
- **Segregation of Waste:** Mandates generators to **segregate waste at source into 3 streams** - Biodegradable, Non-biodegradable, and Sanitary and Domestic Hazardous waste.
- **Collection & Disposal of Waste:** Local authorities are responsible for setting up waste collection, transportation, processing, and disposal systems.
- **Recovery and recycling facility:** Developers of Special Economic Zone, industrial estate, industrial park to earmark at least 5% of total area of the plot or minimum 5 plots/ sheds for recovery and recycling facility.

Report titled 'Quad: Diplomacy and Cooperation in the Indo-Pacific' assesses the Quad's achievements and potential

Transcending **security dialogue**, Quad has transformed into **multifaceted partnership with broad goals**. It established **six working groups (WGs)** for diverse policies/initiatives since 2017 regrouping.

Various policies/initiatives under Quad

- **Health:** Established **Quad Vaccine Partnership** and it evolved into a broader **Quad Health Security Partnership in 2023**.
 - ⊖ **Other initiatives:** e-health systems expansion, Quad Pandemic Preparedness Exercise.
- **Climate:** Launched the **Quad Climate Change Adaptation and Mitigation Package (Q-CHAMP)** in 2022.
 - ⊖ In 2023 **Principles on Clean Energy Supply Chains** in the Indo-Pacific were released.
- **Critical and Emerging Technology:** **Semiconductor Supply Chain Initiative, 2021** to diversify technology supply chains.
- **Space:** In 2022, it launched the **Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA)**.
- **Infrastructure:** Launched the **Trilateral Partnership for Infrastructure Investment** in the Indo-Pacific (TIP), in 2018.
- **Cybersecurity:** In 2022, established the **Quad Cybersecurity Partnership**.

About Quad

- The Quad, initially known as the **Quadrilateral Security Dialogue**, is a **strategic diplomatic partnership** composed of **Australia, India, Japan, and the United States**.
 - ⊖ It's neither a **military alliance** nor a **mutual defense agreement**.
- **Origin:** In 2007, the **group held its inaugural, but informal first meeting** on the sidelines of the **ASEAN Regional Forum (ARF)**.

Quad countries are home to a **combined 24% of the world's population** and represent **35% of the world's GDP** and **18% of global trade**.

The study — 'Ageing in India - Exploring Preparedness & Response to Care Challenges - A HelpAge India Report' Released

The study was released on the eve of World Elder Abuse Awareness Day (15th June).

- Elderly population (aged 60 and above) will constitute **20.8% of total population by 2050, up from 8.6% in 2011.**

Key Findings

- **Working status:** Only 15% of elderly persons work.
 - ⊕ 24 % of elderly males work compared to just 7 % of elderly females highlighting gender disparity.
- **Lack of Social Security:** Only 29 % of elderly people have access to social security schemes.
- **High Prevalence of Multiple Morbidities:** 54% of all elderly persons are suffering from two or more Non-Communicable Diseases.
- **Digital Access:** 59% had no access to a digital device.
- **Social participation:** Minimal, with only 7% being members of any social organization.

Step Undertaken for Elderly care in India

- **Pradhan Mantri Vaya Vandana Yojana (2015):** A pension scheme to provide a regular income to senior citizens aged 60 years and above.
- **Rashtriya Vayoshri Yojana (2017):** To provide assisted-living devices and other support services to senior citizens (Below Poverty Line category).
- **Maintenance and Welfare of Parents and Senior Citizens Act, 2007:** Aims to ensure the maintenance and welfare of senior citizens by making it a legal obligation for children and relatives.

Bonn Climate Change Conference concluded

During Conference, progress was made toward **adaptation indicators** and better functioning **international carbon market under Article 6 of the Paris Climate Deal.**

- Article 6 of the Paris Climate Deal helps to achieve **countries' emission-reduction goals** with two main market mechanisms:
 - ⊕ **Bilateral deals between countries** and
 - ⊕ **A new global offset market**
- **New Collective Quantified Goal (NCQG) on climate finance** & negotiations on Mitigation Work Programme (MWP) remained main issues with no progress.

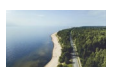
New Collective Quantified Goal

- It was proposed in COP21 for setting post-2025 climate finance goal (new goal).
 - ⊕ **In 2009 parties to UNFCCC** decided to **mobilise \$100 billion annually by 2020** which was subsequently extended to 2025. However, developed countries **failed to deliver this target fully.**
 - ⊕ NCQG proposed to raise floor on **climate finance above current \$100 billion annual target** while addressing key shortcomings in current climate financing mechanism.

Mitigation Work Programme

- It was established at COP26 to urgently enhance mitigation ambition and implementation **to achieve 1.5°C goal of the Paris Agreement.** Program in 2024 will focus on **"Cities: buildings and urban systems"**, including by
 - ⊕ **Reducing operational emissions** (heating, cooling);
 - ⊕ **Designing building envelope for efficiency** (retrofitting);
 - ⊕ **Reducing embodied emissions** (building materials).

Also in News



Baltic Sea

Reportedly, Russian SU-24 bomber breached Swedish airspace near strategically vital Baltic Sea island of Gotland.

About Baltic Sea

- It is an **arm of North Atlantic Ocean.**
 - ⊕ Connected to Atlantic Ocean through **Danish Straits.**
- It **separates Scandinavian Peninsula from rest of continental Europe.**
- It is world's **largest inland brackish sea.** It records **low salinity due to influx of river waters** in large quantity.
- **Surrounding Countries:** Denmark, Germany, Poland, Lithuania, Latvia, Estonia, Russia, Finland and Sweden.
- **Rivers Draining:** Vistula and Oder
- **Kiel Canal** connects North sea to Baltic sea
- **Major Gulfs:** Gulf of Bothnia, Gulf of Finland, Gulf of Riga, Gulf of Gdansk.



Bioluminescence

Recently, Scientists have discovered that bioluminescence is pretty common among deep-sea shrimp.

About Bioluminescence

- It is **property of a living organism to emit light.**
- Light emitted is **produced by energy released from enzyme-catalysed oxidation reactions** in organisms.
 - ⊕ It requires two unique chemicals: **luciferin** and either **luciferase** or **photoprotein.**
- **Spectral range of light emission** of bioluminescent organisms spans from **blue to red light.**
- **Species exhibiting Bioluminescence:** Sponges, jellyfish, hatchet fish, worms, Sea Walnuts, fireflies, fungi, bacteria, etc.
- **Functions of Bioluminescence:** Counter-illumination (**Camouflage against predatory animals**), prey attraction, intra-species communication, etc.



E-flow Monitoring System

Union Jal Shakti Ministry launched an e-flow (Environmental Flow) ecological monitoring system.

- E-flow refers to the flow that is required to meet the ecological functions of the flora and fauna present in the water body.

About E-flow Monitoring System

- It is developed by **National Mission for Clean Ganga** (Namami Gange).
 - ⊕ The Namami Gange program involves cleaning the Ganga and now includes its tributaries.
- It will allow **real-time analysis of the water quality** of the Ganga, Yamuna, and their tributaries.
- It will also allow **monitoring of the Namami Gange program** activities at the central level.



Exercise Tarang Shakti

India will host its **first multinational air Exercise Tarang Shakti in August 2024**.

- Exercise will be scheduled in **two phases** - first will be held in **southern India** and the second will be in the **western sector**.



Speciation

A study has found that Asiatic lions & Bengal tigers co-existed for so long in the Subcontinent due to **Sympatric Speciation**.

About Speciation

- A speciation is a **lineage-splitting event** that produces two or more separate species. This process **generates biodiversity**.

Modes of Speciation

- **Allopatric:** New species formed from geographically isolated populations.
- **Peripatric:** New species formed from a small population isolated at the edge of a larger population.
- **Parapatric:** New species formed from a continuously distributed population.
- **Sympatric:** New species formed from within the range of the ancestral population.



Digital Health Incentive Scheme

Union Government has extended the Digital Health Incentive Scheme (DHIS) till 2025.

About DHIS

- Launched in 2023 as **part of the Ayushman Bharat Digital Mission (ABDM)**.
- Aims to provide **right incentives to providers of digital health solutions** such as Hospital/ Health Management Information System (HMIS) and Laboratory Management Information System (LMIS) **to make available right software at an affordable cost**.
- **Eligible health facilities and digital solutions companies** shall be able to earn financial incentives of up to Rs. 4 crores based on number of digital health records they create.



River Alakananda

A tempo fell into a ditch in the **Alaknanda river** in Uttarakhand.

About Alaknanda river

- **Source:** It originates at an elevation of **3641m from Alkapuri Glacier**.
 - ⊕ **Alkapuri glacier** is combination of snout of **Bhagirath kharak glacier and Satopanth glacier**
- **Alaknada comprises Panchprayags:**
 - ⊕ Alaknanda meets **Dhaul Ganga** at **Vishnuprayag**; Meets **Nandakini** at **Nandaprayag**; Meets **Pindar** at **Karnaprayag**; Meets **Mandakini** at **Rudraprayag**.
 - ⊕ And finally, at **Devprayag**, the **Bhagirathi** meets the **Alaknanda**; hereafter, it is known as the **Ganga**.
 - ⊕ '**Badrinath**' is situated along the **right bank of river Alaknanda**.



eMigrate portal

Ministry of External Affairs (MEA) and State Bank of India signed an MoU for digital payment services on eMigrate portal.

- It will integrate SBlePay with eMigrate **portal to provide digital payment services** to Indian migrant workers, recruiting agents (RAs), and other users of eMigrate portal.

About eMigrate portal

- **Launched in: 2014 for the online emigration process.**
- Initiative by Overseas Employment Division of MEA **to automate emigration processes and create a seamless ecosystem.**
- It assists mainly **blue-collar workers going to Emigration Check Required (ECR) countries.**
- **Allows ECNR (Emigration Check not Required) passport holders' voluntary registration.**

Places in News



Malaysia (Capital: Kuala Lumpur)

A community of seafaring people in Malaysia, the indigenous **Bajau** are being evicted to make way for rapid urbanisation in Sabah, Malaysian Borneo.

Political Features

- Country in **Southeast Asia**, lying **just north** of the Equator.
- **Composed of two non-contiguous regions:**
 - ⊕ **Peninsular Malaysia** - on the Malay Peninsula, and
 - ⊕ **East Malaysia (Malaysia Timur)** - on the island of Borneo.
- **Land boundary:** **Thailand** (North), **Singapore** (South), **Indonesia** (South to East Malaysia) and **Brunei**.
- **Water bodies:** South China Sea and Andaman Sea.

Geographical Features

- **Important Rivers:** The Pahang (longest in Malaysia), the Rajang, etc.
- **Important Lakes:** Kenyir (biggest man-made lake in Southeast Asia), Bera, Chini, etc.
- **Important Straits:** Malacca (southwest) and Balabac Strait.
- **Highest point:** Mount Kinabalu.

