

NEWS TODAY

Delhi High Court (HC) issues directions to improve medications for Rare Diseases

In **Master Arnesh Shaw v. Union of India & Anr. Case**, Delhi HC emphasized that **Right to Health is an integral part of Right to Life (Article 21)** and must be **equally upheld for all individuals**, regardless of whether they suffer from prevalent or Rare Diseases.

Key directions

➤ To Union of India

- ⊕ **Constitute National Rare Diseases Fund (NRDF)** to reduce prices and increase accessibility.
 - ◆ **Donations** for rare diseases to be added in **Schedule VII of Companies Act, 2013** to enable CSR contribution.
 - ◆ **NRDF shall be administered by National rare disease cell** consisting of one or more nodal officers in Ministry of Health and family Welfare (MoH&FW).
- ⊕ **Develop and operationalize centralized National Rare Disease Information Portal** that includes patient registry, available treatments (within 3 month).
- ⊕ Union of India **direct DCGI and CDSCO to create “dedicated Fast Track approval process”** for rare disease drugs and therapy (within 60 days).

➤ To Pharmaceutical companies

- ⊕ **Ensure adequate availability of therapies and medicines** in India for rare diseases, through manufacturing or imports.
- ⊕ Companies importing rare disease therapies shall **submit detailed plan to MoH&FW and National Rare Disease Committee** within 90 days **for establishing local manufacturing/distribution facilities** in India.

About Rare Disease (RD)

- WHO defines rare disease as **debilitating lifelong disease/disorder with prevalence of 1 or less, per 1000 population**. Example: Cystic Fibrosis, Pompe Disease etc.

Initiatives taken for Rare disease

- **National Policy for Rare Diseases, 2021**: Aims to lower incidence and prevalence of rare diseases based on an integrated and comprehensive preventive strategy.
- **Rashtriya Arogya Nidhi**: Provides financial assistance for poor patients suffering from rare disease.

Anusandhan National Research Foundation (ANRF) Launches PMECRG and MAHA-EV initiative

These are first two initiatives of ANRF, which will play a transformative role in **bridging the gap between academic research and industrial application**.

About Prime Minister Early Career Research Grant (PMECRG)

- It aims to **position India as a leader in science and technology** by providing a flexible budget to facilitate ease of research and invest in early career researchers.
- **Significance: Foster high quality innovative research**; Enable researchers to **expand knowledge boundaries** and drive technological progress.

About Mission for Advancement in High-Impact Areas -Electric Vehicle (MAHA-EV)

- It focuses on **development of key EV technologies to reduce dependency on imports** and promote domestic innovation. It is aligned with government's Atmanirbhar Bharat (self-reliant India) vision.
- Concentrating on **three critical technology verticals** i.e. Tropical EV Batteries and Battery Cells, Power Electronics, Machines, and Drives and EV Charging Infrastructure, mission will **enhance domestic capabilities in design and development of essential EV components**.
- **Significance:**
 - ⊕ **Position India as a hub for EV component development**, driving global competitiveness and innovation.
 - ⊕ By accelerating the shift towards electric mobility, it will **contribute to a greener and sustainable future**.

About ANRF

- Established under **ANRF Act 2023 and operates under Department of Science & Technology**.
 - ⊕ With its establishment, Science and Engineering Research Board is subsumed into ANRF.
- Aims to **seed, grow and promote R&D** and foster culture of **research and innovation** throughout India's universities, colleges, research institutions, and R&D laboratories.
- **Act as an apex body to provide high-level strategic direction of scientific research** in country as per recommendations of National Education Policy.

India recalled its High Commissioner and expelled Canadian diplomats amidst diplomatic dispute

Canada asked India to **waive off diplomatic immunity to its officials** alleging their involvement in an investigative matter, which India considered preposterous.

- **Diplomatic immunity** is a principle of international law as per which **foreign government officials are not subject to jurisdiction of local courts and other authorities** for both their official and personal activities.
- **Vienna Convention on Diplomatic Relations, 1961** extends privileges and immunities to diplomatic staff.
 - ⊕ India acceded to it in **1965 and ratified in 1972 through Diplomatic Relations (Vienna Convention) Act of 1972.**

Recent Fallout in India- Canada Relations

- **Issue of Khalistani Extremists:** Sikh separatist groups supported by Canada have been a strain on relations causing diplomatic fallout.
- **Indian sovereignty:** Despite repeated cautions from India, **Canada's support of Khalistani activities** like unofficial referendum on forming an independent Sikh state in 2023 is an attack on India's sovereignty.
- **Security cooperation:** Multiple extradition requests from Government of India in respect of terrorists and organized crime leaders living in Canada have been disregarded.
- **Defunct Agreements:** Comprehensive Economic Partnership Agreement and Foreign Investment Promotion and Protection Agreement have seen no progress.
- **Vote bank politics:** Sikh community (especially in provinces like Ontario and British Columbia), form key vote bank for political parties, particularly Liberal Party.

India-Canada Relations

- **Bilateral trade in goods:** Showed **declining trend** in 2023 (USD 7.65 billion from USD 10.50 billion in 2022).
- **Consular Matters:** Signed **Mutual Legal Assistance Treaty in 1994** and **Extradition Treaty in 1987.**
- **Nuclear Cooperation Agreement:** Signed in **2010** under which Joint Committee on Civil Nuclear Cooperation was instituted.
- **Space:** ISRO, launched its 100th Satellite from PSLV in 2018, also flew Canadian first LEO (Low earth Orbit) satellite.



PM GatiShakti National Master Plan for Multi-Modal Connectivity (PMGS-NMP) completes three years

PMGS-NMP was launched in 2021 for providing multimodal connectivity infrastructure to various economic zones.

Key Achievements of PMGS-NMP

- **On boarding Whole of Government:** Integrated 44 Central Ministries and 36 States/UTs for planning and executing infrastructure projects.
 - ⊕ Over 8,891 km of roads, 27,000 km railway lines, 300 km coastal corridor in Gujarat have been planned using NMP.
- **Social Sector Impact:** Enabled **better infrastructure planning in essential areas** such as primary healthcare, education, and tribal development, especially in remote and underserved areas.
 - ⊕ E.g. Identification of location of new schools in underserved areas of UP via **Pahunch Portal.**
- **State Master Plans:** Established PM GatiShakti State Master Plan portals in all States/UTs, mapping 533+ projects to streamline capital investments.
 - ⊕ **Goa** used NMP to develop **Disaster Management Plan** for flood-prone areas along the Amona River.
- **Trade Facilitation:** Instrumental in reducing logistics costs and improved India's Logistics Performance Index rank from 44 to 38.
- **Data-Driven Development:** Powered by GIS-based tools and real-time monitoring for informed decision-making, and aligning projects with national priorities.
- **District-Level Planning:** **PMGS - District Master Plan portal** is being developed for collaborative planning at district level.

PM GatiShakti National Master Plan

- **Objective:** To create next-generation infrastructure by learning from the past.
- NMP has been developed as a **Digital Master Planning Tool** by BISAG-N (Bhaskaracharya National Institute for Space Applications and Geoinformatics).
- It provides **comprehensive database of ongoing & future projects** of various ministries and states involved in development of Economic Zones.
- **Seven Engines of NMP:** Railways, Roads, Ports, Waterways, Airports, Mass Transport and Logistics Infrastructure.

Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2024 Awarded

It has been awarded to Daron Acemoglu, Simon Johnson and James A. Robinson for “**studies of how institutions are formed and affect prosperity**”.

- They have demonstrated the importance of **societal institutions for a country's prosperity**.
- They also highlighted that **democracy developed** in various colonies as **threat of revolution** by masses could **not be tackled through promise of social reforms**.

Differences in Countries' Prosperity

- **Richest 20%** of the world's countries are now around **30 times richer** than the poorest 20%.
- **One factor** for difference in nations' prosperity is **persistent differences in Societal Institutions**, established by European colonisers. These include:
 - ⊖ **Extractive Institutions:** Formed in some colonies to **exploit the indigenous population and extract natural resources** to benefit the colonisers.
 - ◆ These institutions caused the **reversal of fortunes** as richer nations turned poor after colonization.
 - ◆ E.g. **Industrial Production was higher in India compared to USA** in mid- 18th Century (before colonization).
 - ⊕ **Inclusive Institutions:** Colonisers built inclusive political and economic systems for **long-term benefit of European Settlers** in colonies that were sparsely populated and supported more European settlers.
- **Factors influencing development of different societal institutions** included number of European settlers, settler mortality due to prevalence of diseases in the region (more deadly diseases near equator), and geography or climate zone.

Union Ministry of Power launches National Electricity Plan (Transmission)

National Electricity Plan (NEP) (Transmission) has been **developed by the Central Electricity Authority (CEA)**, entrusted under Electricity Act 2003.

- **Transmission system** establishes the link between source of generation and distribution system, which is connected to load / ultimate consumer.

Key highlights of NEP (Transmission)

- Aim of transmitting of **500 GW of Renewable Energy Installed Capacity** by 2030 and over 600 GW by 2032.
- It is aimed at meeting a **peak demand of 458 GW** by 2032 and will **expand transmission network** from 4.85 lakh ckm (circular kilometer) in 2024 to **6.48 lakh ckm in 2032**.
- **Inter-regional transmission capacity** is planned to increase to 168 GW by 2032, from present level of 119 GW.
- **Incorporates innovative elements** in transmission sector such as integration of 10 GW offshore wind farms, 47 GW battery energy storage systems, and 30 GW pumped storage plants.
- **Aims to address power needs** of Green Hydrogen and Green Ammonia Manufacturing hubs of coastal locations.
- **Covers Cross border interconnections** with Nepal, Bhutan, Myanmar, Bangladesh, Sri Lanka and probable interconnections with Saudi Arabia, UAE etc.

Challenges in India's Transmission System: Transmission losses, issues in integration with renewable sources, obsolete technology, skewed focus of regulators towards generation, cyber security etc.

Central Electricity Authority (CEA)

- It was established under the **repealed Electricity (Supply) Act, 1948**, which has been substituted by **Electricity Act 2003**.
- **Members:** CEA consists of **not more than 14 members** including Chairperson, of whom not more than 8 members are full-time members appointed by Central Government.
- **Functions:** Advise Central Government on National Electricity Policy, specify technical standards for construction of electric plants, electric lines and grid connectivity.

Also in News



Nagarjuna Sagar Srisailem Tiger Reserve

According to **EnviStats India-2024**, Nagarjuna Sagar-Srisailem Tiger Reserve has been ranked first among tiger reserves for **hosting largest leopard population**.

Nagarjuna Sagar Srisailem Tiger Reserve (NSTR)

- **Location:** **Nallamala hill ranges** (offshoot of the Eastern Ghats), Andhra Pradesh.
- **Constitutes of two wildlife sanctuaries - Rajiv Gandhi Wildlife Sanctuary and Gundla Brahmeswaram Wildlife Sanctuary.**
- **Natural Vegetation:** Tropical Dry Deciduous Forest having an under growth of bamboo and grass.
- **Fauna:** Tiger, Leopard, Sloth Bear, Asiatic Wild dog, Jackal, Sambar, Wild Boar etc.
- **River Krishna** traverses through reserve.
- **Waterfalls:** Ethpotala Falls, Pedda Dukudu, Gundam, Chaleswaram.



e-Migrate Portal

Ministry of External Affairs and Ministry of Labor & Employment launched the **e-Migrate portal and mobile app**.

About e-Migrate portal

- Online Platform to **facilitate and manage the migration** of Indian workers seeking employment abroad.
- It aims to provide **various services to migrant workers** including information access, documentation, helpline support etc.
- Feature a **24/7 multilingual helpline** and will be integrated with Digilocker for secure document storage and obtain paperless clearance at immigration.
- It also brings **foreign employers, registered recruitment agents and insurance companies** on one common platform designed to promote **safe & legal migration**.



Production Linked Incentive (PLI) scheme for White Goods (PLIWG)

Recently, an online application window for PLIWG attracted huge response with 43% of new applicants from MSME sector.

About PLIWG

- **Aim:** Provide **financial incentive** to boost domestic manufacturing and attract large investments in **White Goods manufacturing value chain**.
- **Target Segment:** Air conditioners and LEDs Lights.
- **Outcome:** Domestic Value Addition is expected to grow from 15-20% to 75-80%.
- **Ministry:** Department for Promotion of Industry and Internal Trade under **Ministry of Commerce and Industry**.
- **Eligibility:** Incentive shall be provided to **Companies making brownfield or greenfield Investments** for manufacturing in target segments in India.
- **Tenure:** FY 2021-22 to FY 2028-29.



Atmospheric Rivers

Atmospheric rivers are shifting toward higher latitudes which is reshaping global weather pattern.

- Reason for this shift is **changes in sea surface temperatures in eastern tropical Pacific**.

About Atmospheric rivers

- They are **long, narrow bands in atmosphere that transport most of the water vapor outside the tropics**. They play a critical role in replenishing water supplies.

Consequences of Shifting

- Subtropical areas may **experience longer droughts and reduced water supplies**, impacting agriculture.
- **Higher latitude regions** may witness more **extreme rainfall, flooding and landslides**.
- More atmospheric rivers could **speed up sea-ice melting in Arctic**, contributing to global warming and affecting wildlife.



Indian Pharmacopoeia commission (IPC)

Drugs Controller General of India announced that 11 countries have recognized Indian Pharmacopoeia (IP) as their standard.

- IP **prescribes standards for identity, purity and strength of drugs** essentially required from health care perspective. It is **published and updated by IPC**.

About IPC

- An **autonomous institution under Ministry of Health and Family Welfare**. It is created to **set standards of drugs** in country.
- **Functions:**
 - ⊕ Responsible for regularly revising and publishing IP and National Formulary of India.
 - ⊕ Provides IP Reference Substances (IPRS) which act as a fingerprint for identification of an article under test.



Diphtheria

WHO team arrived in Deeg, Rajasthan amidst rising cases of Diphtheria.

About Diphtheria

- Contagious disease that is **caused by toxin producing bacteria** (Corynebacterium diphtheria).
- Infects **respiratory system** mainly affecting children from newborns to 16 years of age.
- **Spreads from person to person** when an infected person coughs or sneezes.
- **Prevented by vaccines** that are often **given in combination** with tetanus and pertussis, hepatitis B and inactivated polio.
- It is **covered under Universal Immunization Program in India** and is given as Diphtheria, Tetanus and Pertussis (DTP).



X-band Radar

Union Ministry of Earth Sciences approved installation of an X-band radar in Kerala's Wayanad district following devastating floods and landslides.

X-band Radar

- Radar (Radio Detection and Ranging) uses **radio waves** to determine the distance, velocity, and physical characteristics of objects.
- An X-band radar emits **radiation in X-band (8-12 GHz)** of electromagnetic spectrum corresponding to smaller wavelengths of around 2-4 cm.
- Small wavelengths allow it to produce **images of higher resolution** but have a relatively shorter range.
- **Benefits:** Monitor movement of particles, such as soil, to inform landslide warnings.



Europa Clipper

NASA's Europa Clipper embarked on long voyage to Jupiter to investigate its **moon Europa**.

About Europa Clipper

- **Objective:** Determine whether Europa has conditions that could support life.
 - ⊖ Evidence suggests presence of **enormous, salty ocean** with more water than Earth beneath Europa's ice.
- It is the **largest spacecraft NASA has ever developed for a planetary mission**.
- It is also the first NASA mission **dedicated to studying an ocean world beyond Earth**.
- It will begin **orbiting Jupiter** in 2030 and conduct **flybys of Europa from 2031**.
- Its **instruments** include ice-penetrating radar, cameras and a thermal instrument to look for any recent eruptions of water.

Place in News



Colombia (Capital: Bogotá)

India has signed Audio-visual Co-production Agreement with Colombia.

Political features

- **Land boundaries:** Venezuela and Brazil (east); Panama (north); Peru and Ecuador (south).
- **Maritime Boundaries:** Caribbean Sea, Pacific Ocean
- **Known as Gateway of South America** because it lies in northwestern part of continent where South America connects with Central and North America.
- **Joined OECD** in 2020.

Geographical features

- **Highest point:** Pico Cristobal Colon
- **Climate:** Tropical along coast and eastern plains; cooler in highlands.
- **Major Rivers:** Magdalena, Amazon, Orinoco etc.
- **Natural resources:** Petroleum, Natural Gas, Coal, Gold etc.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI