

NEWS TODAY

Prime Minister of India holds bilateral talks with Maldives President in New Delhi

Key Outcomes of Maldives President's Visit to India

- Both sides announced adoption of vision for comprehensive economic and maritime security partnership which encompasses-
 - ⊕ **Development Cooperation:** Agreed to support timely completion of **Greater Malé Connectivity Project**, etc.
 - ⊕ **Trade and economic cooperation:** Initiated discussions on **Bilateral Free Trade Agreement**; both sides agreed to operationalize **settlement of trade transactions in local currencies** to reduce dependency on foreign currencies etc.
 - ⊕ **Digital and financial initiatives:** Launch of **RuPay card in Maldives** will enhance ease of payments for Indian tourists visiting Maldives etc.
 - ⊕ **Health cooperation:** To work towards **recognition of Indian pharmacopoeia by Government of Maldives**, followed by establishment of **India-Maldives Jan Aushadhi Kendras** across Maldives etc.
- Both sides signed **Currency Swap Agreement (CSA)** of USD 400 million and INR 30 billion to help Maldives in managing their foreign exchange reserves.
 - ⊕ It was signed under **SAARC Currency Swap Framework 2024-27**.
 - ⊕ CSA is a contract under which **two counterparties agree to exchange two currencies at a set rate** and then to **re-exchange those currencies** at an agreed upon rate at a fixed date in future.
 - ◆ Earlier, India had signed CSA with Sri Lanka, Japan etc.

Importance of Maldives for India

- India's '**Neighbourhood First**' policy (NFP): Maldives is one of the cornerstones of NFP and SAGAR (Security and Growth for All in the Region) due to its location.
- **Strategic:** Maldives is geographically positioned like a '**toll gate**' between **western Indian Ocean chokepoints** (Gulf of Aden and Strait of Hormuz), and **eastern Indian Ocean chokepoint** of Strait of Malacca.

India- Maldives relations

- Maldives was **first country to receive Covid-19 vaccines** from India.
- India emerged as Maldives' largest trade partner in 2023.
- India provided water aid to Male through **Operation NEER**.

India-UAE Bilateral Investment Treaty (BIT) came into effect

BIT, signed in Abu Dhabi in February (2024), entered into force with effect from 31st August, 2024.

- Bilateral Investment Promotion and Protection Agreement between India- UAE (signed in 2013) expired in September, 2024

About BIT

- BITs are **reciprocal agreements between two countries to promote and protect** foreign private investments in each other's territories.
- BITs ensure **minimum guarantees** for foreign investments, fairness under international law, and protection from expropriation by host countries.
- India approved **new Model BIT text in 2015**, which replaced **Indian Model BIT (1993)**.

Key features of India-UAE BIT

- **Investor-State Dispute Settlement** through arbitration with **mandatory exhaustion of Local remedies for 3 years**.
- **Closed asset-based definition of Investment** with coverage of Portfolio Investment.
- **Treatment of Investment** with obligation for **no denial of justice**, no fundamental breach of due process.
- **Provides protection to investments** from Expropriation, provides for Transparency, Transfers and Compensation for losses.

Significance of India – UAE BIT 2024

- **UAE is seventh largest FDI source for India** with share of 3% (\$19 billion) in total FDI received by country from April 2000-June 2024.
- Boost confidence of investors by **assuring minimum standard of treatment** and **non-discrimination** while providing an independent forum for dispute settlement by arbitration.

India-UAE Relation

- **Trade:** UAE is India's **third largest** trading partner after US and China.
- **Defense:** Conduct joint military exercise **Desert Cyclone**.
- **Energy security:** UAE continues to be an **important supplier of crude, LNG and LPG to Indian market**. India is the 3rd largest importer of oil and 4th largest importer of LNG.

Nobel prize in Physiology or Medicine awarded for discovery of microRNAs

It has been awarded jointly to **Victor Ambros** and **Gary Ruvkun** for the discovery of **microRNA** and its role in **post-transcriptional gene regulation**.

➤ **Gene regulation** is how a cell controls which genes, out of many genes in its genome, are expressed, allowing for **production of a specific protein**.

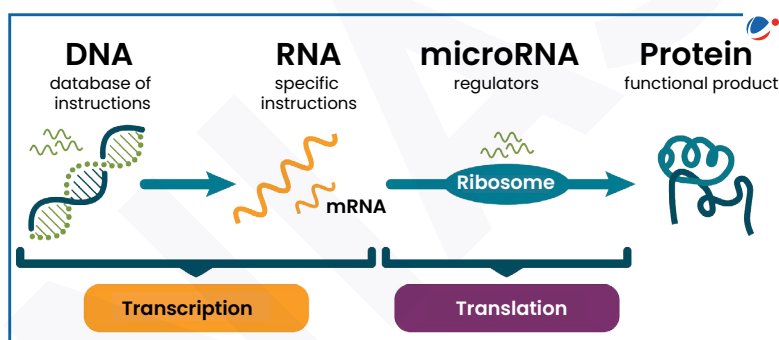
- ⊕ **Genetic information flows** from DNA to messenger RNA (mRNA), via a process called **transcription**, and then on to the cellular machinery for **protein production**.
- ⊕ Human organs and tissues consist of **different cell types**, all with **identical genetic information** stored in their DNA.
- ⊕ However, due to gene regulation, these different cells (like muscle cells, nerve cells etc.) **express unique sets of proteins**, enabling them to perform their specialized functions.

About microRNA

- microRNAs are **small non-coding RNA** (single-stranded molecules playing key role in turning DNA instructions into proteins) that helps **cells regulate gene expression**.
- microRNA **controls gene expression by binding with mRNA** and preventing them from being translated into proteins or by degrading mRNA altogether.
- There are more than a **thousand genes for different microRNAs** in humans, and gene regulation by microRNA is **universal among multicellular organisms**.

Other Roles of microRNA

- **Cellular Development:** Involved in the differentiation of stem cells and development of tissues and organs.
- **Immune Response:** miRNAs regulate innate and adaptive immune responses.
- **Oncogenesis:** Dysregulation of miRNAs is associated with cancer development, while they may also act as tumour suppressors.
- **Disease diagnostics:** Used as biomarkers for diseases such as cancer, parkinson disease etc.



Ministry of Defence launches ADITI 2.0 and DISC 12 at DefConnect 4.0

DefConnect 4.0 is being organised by **Innovations for Defence Excellence - Defence Innovation Organisation (iDEX-DIO)**, under Ministry of Defence.

Key Initiatives

➤ **2nd edition of Acing Development of Innovative Technologies with iDEX (ADITI 2.0):**

- ⊕ **Features:** 19 challenges from the Armed Forces and allied agencies in the domains of Artificial Intelligence (AI), Quantum Technology, anti-drone systems etc.
- ⊕ **Grants:** Offers up to **₹25 crore** to iDEX winners.
- ⊕ **Focus:** **30 Critical and Strategic defence technologies**.

➤ **12th edition of Defence India Start-up Challenges (DISC 12):**

- ⊕ **Features:** 41 challenges in key technology domains: UAVs, AI, Networking and Communication.
- ⊕ **Grants:** Offers up to **₹1.5 crore** for selected innovations.
- ⊕ Launched in **partnership with Atal Innovation Mission** to support start-ups, MSMEs, and innovators to develop prototypes and commercialize products.
- ⊕ Introduces **Medical Innovations and Research Advancement (MIRA)** initiative for developing medical technologies for the Armed Forces.

Scheme for Innovations for Defence Excellence (iDEX)

- **Launched** in 2021 by MoD and implemented by **DIO, a not-for-profit company**, under MoD.
- **Grants:** Provides up to **Rs. 1.50 Cr (up to Rs. 10 Cr in case of iDEX Prime)** to Start-ups/MSMEs under **DISC and Open Challenge through the Support for Prototype and Research Kick start (SPARK Framework)**.

Other Initiatives for Defence Technology Absorption



Amendment to Defence Acquisition Procedure 2020



Signals Technology Evaluation and Adaptation Group (STEAG)



Indian Naval Indigenisation Plan (2015-2030)

➤ **26 products have been developed** under iDEX, for which procurement orders worth more than Rs 1,000 crore have been placed.

Centre unveiled Initiatives to boost Nutrition Support for TB Patients and their families

These initiatives are in line with India's commitment to accelerate achievement of Sustainable Development Goals related to TB elimination.

Key Initiatives announced by Ministry of Health and Family Welfare

- Increase in Nutrition support under Ni-Kshay Poshan Yojana from Rs. 500 to Rs. 1,000 per month per patient for entire duration of treatment.
- Introduction of Energy Dense Nutrition Supplementation (EDNS) for patients with Body Mass Index (ratio of height to weight to estimate amount of body fat) less than 18.5kg/m² (represent **underweight individuals**).
 - ⊖ EDNS would be provided to all eligible patients for **first two months of their treatment**.
 - ⊖ EDNS share will be distributed between **centre and states on 60:40 basis**.
- Expanding scope of Ni-Kshay Mitra initiative under Pradhan Mantri TB Mukh Bharat Abhiyaan (PMTBMBA) to include family members (household contacts) of TB patients improving their immunity and reducing out-of-pocket expenses.

About Tuberculosis (TB)

- An infectious **bacterial disease** caused by **Mycobacterium tuberculosis**, which is transmitted by **aerosols** and most commonly **affects lungs**.
- **Bacille Calmette-Guerin vaccine** provides immunity against TB.
- **Most common antibiotics used for treatment:** Isoniazid, Rifampin, Pyrazinamide, Streptomycin.

Challenges faced in Treatment: Social Stigma and taboo, comorbidities (with HIV, diabetes), high dropout rates while treatment, drug resistance etc.

Other Initiatives to tackle Tuberculosis

- **Ni-Kshay Mitra** provides additional nutritional, investigation and vocational support to all on-treatment TB patients.
- **PMTBMBA** bring together all community stakeholders to accelerate country's progress towards TB elimination.
- **Mission Indradhanush** includes vaccination against Tuberculosis.
- **Regional Prospective Observational Research for Tuberculosis (RePORT) India** is a bilateral, multi-organizational, collaborative effort established in 2013 under Indo-US Vaccine Action Program.

Supreme Court issues notices to eight States on appointment of acting Director General of Police (DGP)

All these states, barring Odisha, currently have **temporary chiefs of police** designated as Acting DGP, in **violation of Supreme Court Guidelines** in 2006 Prakash Singh Case and 2018 judgement.

Supreme Court Guidelines in Prakash Singh Case (2006)

- Ensure that the DGP is **appointed through merit-based transparent process** and secure a **minimum fixed tenure of two years**.
- DGP of state shall be selected by State Government from amongst the **three senior-most officers empanelled** for promotion by **Union Public Service Commission**.
- Constitute a **State Security Commission (SSC)** to ensure state government does not exercise unwarranted influence or pressure on police.
 - ⊖ DGP can be **removed by the state government with the State Security Commission's input**, due to disciplinary action, criminal conviction, corruption, or incapacitation.
- Set up a **Police Establishment Board (PEB)** to **decide transfers, postings, promotions and other service-related matters** of police officers below rank of Deputy Superintendent of Police (DSP) and make transfer and posting recommendations above DSP rank.
- **Police Officers on operational duties** in the field like the Inspector General of Police (IGP), Deputy IGP, Superintendent of Police shall also have a **prescribed minimum tenure of two years**.

Supreme Court's Directions in 2018 Judgement

- Supreme Court directed all states and Union Territories to **not appoint any police officer as acting DGP**.
- All the states to **send names of senior police officers to UPSC** for being considered as probable candidates to be appointed as DGPs or Police Commissioners.
 - ⊖ **UPSC, in turn, will prepare a list of three most suitable officers and the states will be free to appoint one of them as police chief.**

Also in News



Falkland Islands and Gibraltar

British Foreign Secretary affirms that UK's sovereignty over **Falkland Islands and Gibraltar** is non-negotiable.

About Falkland Islands (Islas Malvinas)

- It is a **British overseas territory** in the South Atlantic Ocean.
 - ⊖ Claimed by **Argentina**.

- Comprises two main islands, **East Falkland and West Falkland**.

About Gibraltar

- British overseas territory on **Iberian Peninsula**, on the Bay of Gibraltar.
 - ⊖ Ceded to Britain by Spain under the **Treaty of Utrecht (1713)**.
- **Strait of Gibraltar** connects the Atlantic Ocean to the Mediterranean Sea and separates Europe from Africa.



Indian Institute of Foreign Trade (IIFT)

India Pavilion at Expo City in Dubai will host first overseas campus of IIFT.

- IIFT will collaborate with Expo City Dubai on research projects and other knowledge-sharing activities focused on sustainability and innovation.

About IIFT

- India's **premier business institution focussing on Foreign Trade** and regarded as an **academic centre of excellence** in international business research, training and education.
- **Established in 1963** as an **autonomous body** under **Ministry of Commerce**.
- Granted "**Deemed to be University**" status in 2002.
- **National Assessment and Accreditation Council** has recognized IIFT as **Grade 'A' Institution** in 2005 and in 2015.



Red Panda (*Ailurus fulgens*)

Red Panda Program of Darjeeling's Padmaja Naidu Himalayan Zoo's has been selected as finalist for 2024 WAZA (World Association of Zoos and Aquariums) Conservation Award.

About Red Panda (Sikkim's State Animal)

- **Small arboreal mammals** considered an **indicator species** for ecological change.
- **Habitat:** Mixed deciduous and conifer forests with dense understories of bamboo.
- **Distribution:** India (Sikkim, West Bengal, Meghalaya and Arunachal Pradesh), Nepal, Bhutan, Myanmar, China.
- **Characteristics:** Skilled climbers; normally solitary but come together in **pairs in breeding season**; most active during twilight hours of early morning and evening (**crepuscular**),
- **Status:** Endangered (IUCN Red list), Schedule I (Wildlife Protection Act, 1972).



Halari Donkeys

Halari Donkeys are considered to be intelligent animals and form close bonds with people, supporting them for transport needs.

About Halari Donkeys

- **Native Region:** Indigenous to **Halar region (Gujarat)**. Important livestock in **semi-arid landscape of Saurashtra's Jamnagar and Dwarka district, Gujarat**.
- **Physical Characteristics:** Typically larger and more resilient than other donkey breeds; predominantly white.
- **Economic Value:** Milk is known for its sweetness, with **milk powder fetching over Rs. 7,000 per kg** in international market and used for cosmetic uses.
- **Conservation Efforts:** **Sahjeevan Trust in collaboration with Animal Husbandry Department of Gujarat government**.
⊕ Their surviving population is fewer than 500.



Coordination Committee for Air Quality Management in IGP region

Union Government has set up the Coordination Committee for Air Quality Management in the **Indo-Gangetic Plain (IGP) region**.

- The ten-member panel will work on comprehensive mitigation measures to check air pollution across **Bihar, Chandigarh, Delhi, Haryana, Jharkhand, Punjab, Uttar Pradesh, and West Bengal**.
⊕ On account of typical geography and meteorology, these states have **high baseline levels of air pollution** which requires regional airshed management to abate air pollution.
- Coordination Panel has been tasked with integrating state action plans to develop **IGP Regional Airshed Management Plan** and monitor its implementation.



State of Global Water Resources Report

The report has been coordinated by the World Meteorological Organization (WMO).

➤ **WMO** is a specialized agency of United Nations responsible for promoting international cooperation in atmospheric science and meteorology.

Key Findings

- **Hydrological extremes:** Year 2023 was the hottest year on record.
- **Levels of soil moisture were predominantly below or much below normal** across large territories globally.
- **2023 was driest year for global rivers** in 33 years.
- **Lake Coari** in the Amazon faced below-normal water levels, leading to extreme water temperature.
- **Glaciers:** Glaciers suffered the largest mass loss ever registered in the **last five decades**.



Advanced Glycation End Products (AGEs)

ICMR and Madras Diabetes Research Foundation MDRF study highlighted that AGEs rich diet is leading cause of diabetes in India.

About AGEs

- Harmful compounds formed when **sugars react with fats or proteins during high-temperature cooking** (frying/roasting).
- Consumption of AGE-rich ultra-processed and fast-foods can lead to **oxidative stress and inflammation (underlying cause of diabetes)**.
- Study recommends **low-AGE diet** (fruits, vegetables, whole grains, low-fat milk) **cooked by boiling and steaming** for overweight and obese individuals.
⊕ It leads to **improvement in insulin-sensitivity and reduction in inflammatory levels** in individual.
◆ **Insulin sensitivity** refers to how well cells respond to insulin for glucose uptake from blood.



Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU)

India participated in 44th Session of CCNFSDU, held in **Dresden, Germany**.

➤ India highlighted need to **update and harmonize international probiotic regulations**.

About CCNFSDU

- It is **one of the active Codex Committee**.
- It **studies specific nutritional problems assigned to it by Codex Alimentarius Commission (CAC)** and advise CAC on general nutrition issues.
- It drafts general provisions, as appropriate, concerning the nutritional aspects of all foods.

About CAC

- Responsible for all matters regarding **implementation of Joint FAO/WHO Food Standards Programme**. It works in 6 UN language.
- **Members:** 189 including **India**.

Place in News



Kazakhstan (Capital: Astana)

Recently, Kazakhstan held a **referendum on constructing its first nuclear power plant to increase energy production**.

Political Features

- **Location:** Landlocked country in Central Asia, with a part in Eastern Europe.
- **Bordering Areas:** Russia (Northwest and North); China (East); Kyrgyzstan, Uzbekistan, and Turkmenistan (South).
- **Bordering Water Bodies:** Aral Sea (South) and Caspian Sea (Southwest).

Geographical Features

- **Mountains:** Tien Shan Range, Altai mountains
- **Rivers:** Ural, Irtysh
- **Kazakh Steppe** is world's largest dry steppe region.
- **Minerals:** World's **largest uranium producer**.

