

NEWS TODAY

India & Mauritius signed a protocol amending the Double Taxation Avoidance Agreement (DTAA)

- Amendment included **Principal Purpose Test (PPT)** to avail tax benefits under the DTAA to plug the abuse of treaty for tax evasion and avoidance.
 - ⊖ PPT lays out the condition that the **tax benefits under the treaty will not be applicable if obtaining that duty benefit was the principal purpose** of any transaction or arrangement.
 - ⊖ Protocol to amend DTAA is aimed at making it compliant with **Base Erosion and Profit Shifting (BEPS) Minimum Standards**.
- DTAA is an agreement between two countries/territories with an objective to avoid double taxation on same declared asset in two different countries/territories.
 - ⊖ **DTAA between India and Mauritius was first signed in 1982** and amended in 2016.
- **Significance of DTAA**
 - ⊖ **Promotion of cross-border investment** by reducing tax burden on foreign investors.
 - ⊖ **Equitable allocation of right to tax** between the 'source' and 'residence' countries.
 - ⊖ **Provides legal certainty** on taxing international income.
- **Issues associated with DTAA**
 - ⊖ **Treaty Shopping:** Takes place when residents of a country, which is not a party to the DTAA, take advantage of the provisions.
 - ⊖ **Double non-taxation:** Abuse of DTAA to avoid paying taxes in both countries.
 - ⊖ **Differential interpretations** of tax treaties leading to protracted litigations.

Base Erosion and Profit Shifting (BEPS)

- Refers to **tax planning strategies that exploit gaps and mismatches in tax rules** for tax avoidance by **shifting profits from higher tax to lower tax jurisdictions**.
- **Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS** aims to update international tax rules and lessen opportunity for tax avoidance by multinational enterprises.
 - ⊖ **India signed** the convention in **2017**.

The government decided to maximize electricity from gas-based power plants to meet Summer Demand

- The government has directed Gas-Based Generating Stations under **Section 11 of the Electricity Act, of 2003**.
 - ⊖ It allows the **government to order a generating company to operate and maintain** a generating station in exceptional circumstances.
- Similarly, the government has been promoting a **gas-based economy to ensure energy security**.
- Natural gas is a **fossil fuel energy source**. The largest component of natural gas is **methane**.
- **Need for gas-based economy**
 - ⊖ **Reduce Greenhouse gas emissions:** As per International Energy Agency, on average Coal-to-gas switching reduces emissions by 50% when producing electricity.
 - ⊖ **Backup to Renewables:** Natural gas plants start quickly and can fill the electricity grid gap when renewables aren't producing enough.
 - ⊖ **Meeting international commitment:** contribute towards achieving net zero by 2070 and meeting the targets of Nationally Determined Contribution targets.
- **Challenges related to gas-based economy**
 - ⊖ **Small share in energy mix:** It was just above 6% in 2022.
 - ⊖ **High import dependence:** India imported 48.2% of its natural gas in FY22.
 - ⊖ **The fertilizer sector has the largest share** in the overall consumption of natural gas which is highly subsidized.

Government initiatives to promote gas-based economy

- **National Gas Grid** for pipeline infrastructure.
- **City Gas Distribution Networks:** Involves Compressed Natural Gas (CNG) for use as auto-fuel, and Piped Natural Gas (PNG) for use in domestic, commercial, and industrial segments.
- **Sustainable Alternative Towards Affordable Transportation (SATAT):** to extract economic value from biomass waste in the form of Compressed Bio Gas (CBG) and bio-manure.

Land Conflict Watch, a data-research project, prepared database of land-related conflicts under Forest Rights Act (FRA)

- **Scheduled Tribes and Other Traditional Forest Dwellers (Recognition Of Forest Rights) Act**, popularly known as FRA was enacted in 2006.
- As per the FRA, the **state governments / UT administrations** are responsible for the **implementation of various provisions** of the Act.
 - ⊕ According to the Ministry of Tribal Affairs, **23.43 lakh land titles** have been distributed (individual and community rights) across States.
- **Features of the Act**
 - ⊕ The act recognizes **individual rights** (Rights of Self-cultivation and Habitation) and **community rights** (Grazing, Fishing, access to Water bodies, etc.)
 - ⊕ **Role of Gram Sabha**- identification of beneficiaries, permission for the diversion of forestland for non-forest purposes, etc.
 - ⊕ **Forest land means** land of any description falling within any forest area including unclassified forests, existing or deemed forests, protected forests, etc.
 - ⊕ Rights can be claimed by any member or community that has **for at least three generations (75 years) before the 13th day of December 2005 lived in the forest.**
- **Issues:** Slow Implementation, limited grievance redressal mechanisms, predominantly focused on individual rights, etc.

The Central government ordered an investigation into organ transplants involving foreign nationals

- **National Organ & Tissue Transplant Organization (NOTTO)** data reveals that there is a substantial increase in foreign national organ transplants through private hospitals.
 - ⊕ There are reports of **"commercial dealings" in organs** (not allowed in India) being transplanted on foreigners.
- **Organ Transplantation** is the **surgical removal of an organ** from one person and transplanting it to another person.
- **Framework for Organ Transplant in India**
 - ⊕ **Transplantation of Human Organs Act (THOA)**, 1994 is the primary law governing transplants in the country.
 - ⊕ **Eligibility for organ donation**
 - ◆ Most of organ donation is determined by the **donor's physical condition, not age.**
 - ◆ **Both living** (must be at least 18 years of age) and **deceased** can donate organs.
 - » **Consent from the family is required for organ donation** from the dead.
- **Issues in Organ Transplantation in India**
 - ⊕ **High Burden (Demand versus Supply gap)** has increased illegal organ trade.
 - ⊕ Lack of **Organized systems for organ procurement** from deceased donors.
 - ⊕ **Poor Awareness and attitude** towards organ donation.
- As per the latest **National Organ Transplantation Guidelines**
 - ⊕ **Persons above 65 years can receive an organ** for transplantation from the deceased.
 - ⊕ The requirement of **domicile of the state for registration of patients** requiring organ transplantation from deceased donors was removed.

About NOTTO

- The national-level organization set up under the **Ministry of Health and Family Welfare.**
- **Functions:**
 - ⊕ All India activities of **coordination and networking for procurement and distribution** of Organs and Tissues.
 - ⊕ **Registry of Organs and Tissues Donation and Transplantation.**

World's First Orbiter that allows Smartphones to make direct Satellite Calls

- **Chinese scientists** have developed world's **first satellite series (Tiantong-1)** capable of **enabling smartphone calls without the need for ground-based infrastructure** such as Base Transceiver Station (BTSs) or cellular towers.
- **About Chinese Satellite Communication Technology (SCT)**
 - ⊕ **Tiantong-1 series** of satellites consist of **three satellites placed in geosynchronous orbit** at an altitude of ~36000 km, covering entire Asia-Pacific region from Middle East to the Pacific Ocean.
 - ◆ **Geosynchronous orbit** is a special position high above the Earth that allows an object to keep pace with the rotation our planet.
 - ⊕ In Sep 2023, Huawei Technologies released the **world's first smartphone that supported satellite calls**, by directly connecting to the Tiantong satellites.
- **Significance of SCT**
 - ⊕ **Accessibility:** Seamless and ubiquitous access to communication services in remote, rural, and hard-to-reach areas.
 - ⊕ **Contingency planning:** SCT can be crucial during natural disasters or other emergencies when terrestrial networks may be damaged or disrupted.
 - ⊕ **Military and Defense applications:** Can enable secure and reliable communication, navigation, surveillance, and intelligence gathering.
- **Concerns associated with SCT:** Space debris and orbital congestion, regulatory and governance challenges due to issues of international coordination and liability, cyber threats such as jamming, spoofing, etc.

Satellite Communication Technology in India

- **Under Telecommunications Act, 2023** satellite communication companies can get spectrum without auction for point-to-point communications.
- Department of Telecommunication (DoT) issues **Global Mobile Personal Communications by Satellite (GMPCS) Licenses** for satellite telephony.
- Earlier, **Bharati Group and Reliance Group** have been issued GMPCS license.

Delhi's Lady Hardinge Medical College opens Radiation Therapy facility

- Radiation therapy, or radiotherapy, is a **type of cancer treatment** in which cancerous cells are killed by exposing them to **ionizing radiations**, such as **X-rays, gamma rays, high-energy electrons or heavy particles**.
- **Types of Radiation therapy**
 - ⊖ **External (Teletherapy):** Uses a **linear accelerator** and radiations are sent from a distance to target cells.
 - ⊖ **Internal (Brachytherapy):** Source of radiation is put inside the body.
- **Significance: Highly effective and well-established treatment** for brain, breast, head and neck, cervical cancers, etc., while minimizing damage to healthy tissues from high doses of radiation.
- **Potential side-effects of Radiotherapy:** Fatigue, Nausea, Hair loss, Loss of appetite, etc.
- **Proton therapy** is an advanced and highly precise radiation treatment for cancerous cells. Compared with traditional methods, it focuses more energy on cancerous cells itself with less radiation to surrounding healthy tissues.
- **Traditional radiotherapy vs. Proton therapy**

Parameters	Traditional Radiation Therapy	Proton therapy
Risk of damaging the nearby healthy cells	Low	Very low
Applicability	Not suitable for treatment near sensitive organs like eyes, brain, spine, etc.	Suitable for treatment near sensitive organs like eyes, brain, etc.
Cost	Less expensive	More expensive.
Side effects	Mostly severe, affecting day to day activities	Less severe and do not interfere with normal functioning.

Also in News



Food Safety and Standards Authority (FSSAI)

- FSSAI has clarified that **currently there are no standards for the term "health drink"** in the country.
- **About FSSAI**
 - ⊖ **Established:** Under the Food Safety and Standards Act, 2006
 - ⊖ **Ministry:** Ministry of Health and Family Welfare
 - ⊖ **Role:** Laying down science-based standards for articles of food and regulating their manufacture, store, distribution, and sale.
 - ⊖ **Organizational Structure:** It consists of a Chairperson appointed by the Centre along with twenty-two members out of which one-third shall be women



Ashwagandha (*Withania somnifera*)

- Ashwagandha is growing in popularity, both in India and abroad.
- **About Ashwagandha**
 - ⊖ It is an **evergreen shrub** found in parts of **India, Africa, and the Middle East**.
 - ⊖ Used as a **medicinal plant**, especially in **traditional Ayurvedic medicine**.
 - ⊖ Contains **several bioactive compounds**, including **withanolides**, which have anti-inflammatory and antioxidant effects.
 - ⊖ Its supplements are often **promoted for stress and anxiety, sleep, male infertility, athletic performance, etc.**



India Post (IP) in Antarctica

- India Post **opened a post office at its Bharati station** in Antarctica.
- The inauguration coincided with the 24th Foundation Day of the **National Centre for Polar and Ocean Research (NCPOR), Goa**.
- Earlier, IP had set up post offices at **Dakshin Gangotri Station in 1984** and another at **Maitri Station in 1990**.
- **About IP/department of post**
 - ⊖ It comes under the **Ministry of Communications**.
 - ⊖ With more than 1,55,000 post offices, it has the **most widely distributed postal network in the world**.



Shrinkflation

- Rising input costs have made the fast-moving consumer goods (FMCG) segment to adopt shrinkflation.
- **About Shrinkflation**
 - ⊖ It is the **practice of reducing the size of a product** while maintaining its current retail price. e.g., reducing the number of biscuits or chips in a packet for the same price.
 - ⊖ It is a **form of hidden inflation**, which companies adopt to reduce fall in customers due to price rise.
 - ⊖ **Causes:** Higher production cost, intense market competition, etc.



Special Rupee Vostro Account (SRVA)

- The government simplified the **payment mechanism for pulses import from Myanmar** through the utilization of Vostro Accounts
- **About Vostro Account**
 - ⊖ A Vostro account is a bank account that other **foreign banks hold with "our" bank** in the domestic currency i.e rupees.
 - ⊖ SRVA is an **additional arrangement to the existing system** that uses freely convertible currencies and works as a complimentary system.
 - ⊖ **Prior RBI approval is required** for opening of SRVA
 - ⊖ These accounts **reduce the need for holding foreign exchange reserves and dependence on foreign currencies** for bilateral transactions.



Ringwoodite

- Researchers have uncovered a vast reservoir of water, dubbed the "Ringwoodite Ocean," concealed within the Earth's mantle, over 700 kms beneath the surface.
 - ⊖ "Ringwoodite Ocean" is a **vast reservoir of water trapped within the mineral ringwoodite** in the Earth's mantle.
- **About Ringwoodite**
 - ⊖ It is a **vivid blue mineral** formed under high temperatures and pressures in **Earth's mantle**.
 - ⊖ It is one of the **most typical high-pressure mineral in meteorites**.
 - ⊖ Named after Australian earth scientist **Alfred E. Ringwood** who studied polymorphic phase transitions in common mantle minerals, olivine and pyroxene.



Operation Meghdoot and Siachen Glacier

- **Indian Army and Indian Air Force** marked **40th year** of its presence on strategically-significant Siachen glacier under **Operation Meghdoot**.
 - ⊖ **Operation Meghdoot** was launched on 13 April 1984, when Indian Army and Indian Air Force (IAF) advanced to Siachen to secure heights dominating Northern Ladakh.
- **About Siachen Glacier**
 - ⊖ **Located at the height of 20,000 feet**, in the Eastern **Karakoram Range** of the Himalayas.
 - ⊖ It is the **second longest (75KM) non-polar glacier** in the world, after Fedchenko Glacier in Tajikistan.
 - ⊖ **Nubra river originates** from the Siachen glacier.
 - ⊖ It is the **highest militarized zone** in the world.



Science Based Targets Initiative (SBTi)

- Climate experts **voiced concerns regarding SBTi's decision** allowing companies to offset greenhouse gas emissions from their value chain.
- SBTi is a **corporate climate action organization that enables companies and financial institutions worldwide** to combat the climate crisis.
- It **develops standards, tools, and guidance** to meet corporate climate targets.
- It is **Incorporated as a charity, SBTi's partners include**,
 - ⊖ Carbon Disclosure Project (CDP)
 - ⊖ United Nations Global Compact,
 - ⊖ We Mean Business Coalition,
 - ⊖ World Resources Institute (WRI), and
 - ⊖ World Wide Fund for Nature (WWF).

Place in News



Colombia (Capital: Bogota)

- Bogota **started water rationing** due to **low levels of water in its reservoirs**.
- **Political Features:**
 - ⊖ Located in the northwestern part of the **South American continent**.
 - ⊖ Bounded by the **Caribbean Sea** in the north, **Pacific Ocean** in the west.
 - ⊖ **Neighboring countries:** **Panama** on the west, **Venezuela and Brazil** on the east, **Peru and Ecuador** on the south.
- **Geographical Features**
 - ⊖ **Andes Mountains** run along the western flank, and the **Amazon Forest** in the southeast.
 - ⊖ **Important Peaks:** Pico Cristóbal Colón and Simón Bolívar.
 - ⊖ **Rivers:** Amazon, Magdalena, Orinoco.

