

# NEWS TODAY

## Telecommunications Bill 2023 Introduced in Lok Sabha

- Bill seeks to regulate activities related to **telecommunication** and provide a new legal framework in Telecom Sector.
  - ⊙ It repeals **Indian Telegraph Act 1885**, **Indian Wireless Telegraphy Act 1933**, and **Telegraph Wires (Unlawful Possession) Act 1950**.
  - ⊙ It also amends **Telecom Regulatory Authority of India (TRAI) Act, 1997**.
- **Key Provisions of Bill**
  - ⊙ **Telecommunication service** means any service for telecommunication (Direct reference to **over-the-top (OTT) communication services**, as mentioned in 2022 draft bill, has been removed).
  - ⊙ Allows **government to take over telecom services** in the interests of **national security** and in **case of emergencies**.
  - ⊙ **Spectrum** will be assigned by **auction**, except for specified uses, where it will be allocated on an **administrative basis**.
    - ◆ These include purposes such as **national security and defence**, **disaster management**, **weather forecasting** etc.
  - ⊙ **Universal Service Obligation Fund** (established under 1885 Act) is to be renamed as **Digital Bharat Nidhi**.
  - ⊙ **Online mechanism** for registration and redressal of grievances.
  - ⊙ **Amends the TRAI Act** to allow individuals with:
    - ◆ **At least 30 years** of professional experience to **serve as chairperson**.
    - ◆ **At least 25 years** of professional experience to **serve as members**.



## Asian Development Bank (ADB) approved US \$200 million loan to India to Improve Waste Management and Sanitation

- **ADB's initiative** aims to enhance **municipal solid waste (MSW)** management under **SBM-U 2.0** which commits **all cities to be garbage-free** by 2026.
  - ⊙ ADB's Initiative (refer infographics) will be implemented in **100 cities across 8 states** with a focus on **climate resilience and social inclusivity**.
- **About MSW in India**
  - ⊙ MSW comprises **solid or semi-solid commercial and residential wastes** including treated bio-medical wastes but excluding industrial hazardous wastes from municipal areas.
  - ⊙ In 2020-21, **India generated 1.6 lakh TPD (Tonnes Per Day)** of **solid waste**, with 95.4% collected, but **only 50% treated** (CPCB report).
  - ⊙ Management of MSW is the responsibility of **Urban Local Bodies (ULBs)**.
- **Issues in MSW management in India**
  - ⊙ Initially, **urbanization did not incorporate MSW management** as a component.
  - ⊙ **Suboptimal compliance** of source segregation.
  - ⊙ **Insufficient funds** with ULBs.
- **Key initiatives:**
  - ⊙ **Solid Waste Management Rules, 2016** provide for detailed criteria for setting-up solid waste processing and treatment facility, among others.
  - ⊙ **Waste to Wealth Mission** to generate energy, recycle materials, and extract resources of value from waste.
  - ⊙ **SBM-U 2.0** calls for **100% source segregation, door to door collection, etc.**

### Key initiatives envisioned by ADB

Upgrade and establish waste management facilities e.g. biomethanation plants,

Build ULB's capacity on waste management and sanitation

Training and awareness campaigns to improve waste segregation and waste collection.

Help conduct annual reviews and progress updates of citywide solid waste action plans

## Ministry of Earth Sciences Launched India's 1st Winter Scientific Expedition to Arctic

- Indian scientific expeditions to **Earth's poles (Arctic and the Antarctic)** are facilitated under **Polar Science and Cryosphere Research (PACER)** scheme through **National Centre for Polar and Ocean Research** (institute under Ministry of Earth Sciences).
  - ⊙ Since 2008, India operates a research base in the Arctic named **Himadri** in **Svalbard, Norway**.
    - ◆ **Himadri** has been mostly hosting scientists during **summer (April to October)**.
- **Significance of Winter Expedition (i.e. November to March)**
  - ⊙ **Allow researchers** to conduct unique **scientific observations** during **polar nights**.
    - ◆ **During polar nights** there is no sunlight for **nearly 24 hours** and **sub-zero temperatures** (as low as **-15 degrees Celsius**).
  - ⊙ **Aid in expanding understanding of Arctic**, especially **climate change, space weather, ecosystem adaptations, etc.**
    - ◆ **Space weather** affect **weather and climate** in the tropics, including **monsoons**.
  - ⊙ **Makes India** among select nations with **extended in-time operations in the Arctic**.
    - ◆ **Priority research areas include** atmospheric and space sciences, environmental chemistry, terrestrial ecosystems, and astrophysics etc.
- **Challenges**
  - ⊙ **Unlike Antarctica**, which is governed by **Antarctic Treaty**, Arctic region belongs to various **national jurisdictions**.
  - ⊙ **Limited access, harsh climate**, several months of darkness etc.



### Other initiatives of India with respect to Arctic

- In 2022, India released its **Arctic Policy** entitled '**India and the Arctic: Building a partnership for sustainable development**'.
- India deployed a multi-sensor moored observatory called **IndARC** in the **Kongsfjorden fjord** of the Arctic in 2014.
- Since 2013, India enjoys '**Observer**' status in Arctic Council.
- India is a signatory to the **Svalbard Treaty of 1920**.

## Public Account Committee (PAC) Report on Agriculture Crop Insurance Schemes

- **Report focuses on various crop insurance schemes** like Pradhan Mantri Fasal Bima Yojana (PMFBY) and Restructured Weather Based Crop Insurance Scheme (RWBCIS) etc.
  - ⊙ **Report is based on the CAG report of 2017** relating to the Ministry of Agriculture and Farmers' Welfare.
- **Key Findings of Report**
  - ⊙ **Delayed release of funds** by state governments towards share in premium subsidy were observed.
  - ⊙ **Low Coverage of farmers** under the schemes compared to **population of farmers as per census 2011**, further coverage of non-loanee farmers was negligible.
  - ⊙ **Delay in issue of notification** by state governments to notify crop, area and insurance companies.
  - ⊙ **Delay in settlement of claims** due to reasons like **delayed transmission of yield data , NEFT related issues etc.**
- **Recommendations**
  - ⊙ **Necessary mechanisms** have to be established for **timely release of funds** by state governments.
  - ⊙ **Integrate database of Kisan card, soil health card** for easing the delivery mechanism.
  - ⊙ **Strengthen the monitoring mechanism** to ensure accountability.
  - ⊙ Best practices of **crop cutting experiments** should be emulated across the country to have **accurate data on crop yield**.

### About Public Account Committee

- **One of the three Financial Parliamentary committees**, other two are Estimates Committee and Committee on Public Undertakings.
- **It comprises 22 members** (15 members elected by the Lok Sabha Speaker, and 7 members elected by the Rajya Sabha Chairman) **with a term of one year only**.
- **Chairperson** is appointed by Lok Sabha speaker.
- **First set up in 1921** in the wake of **Montague-Chelmsford Reforms**.

## India leads global remittance charts with \$125 billion in 2023: World Bank's Migration and Development Brief

### Key findings

- Remittances have become the **premier source of finance** for low- and middle-income countries (LMICs) exceeding the more volatile FDI flows in 2023.
- The **growth of remittances** in 2023 was particularly **high in South Asia (7.2%)**, largely due to a **continued increase in remittances to India**.
- Resilient labour markets in advanced economies** and Gulf Cooperation Council (GCC) countries played a pivotal role in enhanced remittances.
  - Remittance flows to India were also boosted by **higher flows from the GCC, especially the UAE** (accounts for 18% of India's total remittances).

### Importance of remittances

- Enhance the sovereign rating** by including remittances in the debt-to-export ratio.
- Can be used as **collateral to lower the costs of international borrowing** and improving a country's debt repayment capability.
- Countercyclical nature** providing stability during economic fluctuations.
- Contribution to public finances** (by generating seigniorage revenues as remittances are deposited in banking system).
  - Seigniorage forms part of the revenue **for a government when the worth of the money is more than the cost of producing it**.

### India's Initiatives to attract remittances

- Nonresident deposit program** to attract foreign-currency-denominated diaspora savings.
- Diaspora bond issuances** (raised around \$11 billion in 1991, 2000, and 2003).
- UPI-PayNow cross-border linkage** aims to cut transaction costs, fostering increased remittance flows to India through formal channels.

## 2,664.05 MLD of STP capacity is established under the National Mission For Clean Ganga (NMCG)

- The NMCG targets to sanction a cumulative Sewage Treatment Plant (STP) capacity of **7,000 Million Litres per Day (MLD) by December 2026**.
  - NMCG, registered as a society, is the **implementing agency** of the **Namami Gange Yojana**.
- However, Currently, the achieved capacity is less than 40% (2,664.05 MLD), **leading to the discharge of untreated sewage into water bodies**.
  - Sewage consists of **wastewater discharged** from homes, industries, hospitals, offices, and other sources.
    - It also **encompasses rainwater** that runs down streets during storms, carrying harmful substances from roads and rooftops.
  - Over 60% of urban India's sewage is untreated**, entering rivers and causing pollution, rendering water unfit for human consumption.
- Challenges in establishing STP in India**
  - Costly:** STP need high capital expenditure and operation and maintenance costs
  - Erratic power supplies:** STPs require continuous power supply to function properly.
  - Other issues:** Problems of acquiring land; outdated infrastructure; inability of ULBs to **attract private bodies**.
- Key initiatives for establishing STP:**
  - Jal Jeevan Mission** calls for 100% sewerage and septage treatment in 500 AMRUT (Atal Mission for Rejuvenation & Urban Transformation) cities.
  - Central Sector Scheme of **Namami Gange** for Ganga and its tributaries.
  - Centrally Sponsored Scheme of **National River Conservation Plan (NRCP)** for rivers other than Ganga.
  - Environment protection Act 1986, and Water (Prevention & Control of Pollution), Act 1974.**

## Also in News



### Katabatic and Anabatic winds

- Recent research reveals that **Katabatic winds** play a role in **cooling Himalayas**.
- Katabatic winds are **cool, denser air moving downhill due to gravity**.
  - They affect local climates, even **reducing humidity in the air and blowing away snow**.
- Contrary to this **anabatic wind** is **warm wind that blows up a mountain slope** due to a **warmer temperature on mountain slope** compared to the temperature in air column.
  - It can influence **cloud formation and precipitation patterns**.



### Gut bacteria

- Recent research indicates that a **variety of gut bacteria safeguards the human gut** from diseases, but this defense **diminishes if a single bacterial species is present in gut**.
  - Diverse gut bacteria hinder pathogen growth by **consuming nutrients that the pathogen needs**.
- Gut bacteria** are an important component of the **microbiota ecosystem in the human gut**.
  - They are known to supply **essential nutrients, synthesizing vitamin K, aiding in cellulose digestion, promoting angiogenesis and enteric nerve function**.



### Lathyrism

- Lathyrism is an **incurable neurological disorder**, which clinically manifests as **paralysis of lower limbs**.
- It is caused by eating large quantities of legume **Lathyrus Sativus (khesari dal or grass pea)** which contains **neurotoxins ODAP**.
  - ⊖ This legume **resembles toor dal, grows easily in fallow fields, and resistant to pests and biotic stress**.
  - ⊖ **In 1961, India banned its sale** under the Prevention of Food Adulteration Act, 1954. However, **cultivation is allowed** as it is used for animal feed.



### Zero Trust Authentication

- In response to rising **cyber-attacks**, Centre has established a **secure e-mail system for 10,000 users** across critical ministries and departments.
  - ⊖ **National Informatics Centre (NIC)** has designed this system, incorporating **Zero Trust Authentication (ZTA)**.
  - ⊖ NIC is under **Ministry of Electronics and Information Technology**.
- **About ZTA**
  - ⊖ ZTA is a **cyber-security approach** intended to address **rapidly evolving security risks** faced by IT systems.
  - ⊖ It uses **multi-factor authentication, continuous monitoring** etc.
  - ⊖ Works on **never trust, always verify principle**.



### International Year of Camelids

- **United Nations** has designated **2024 as the International Year of Camelids**.
- **About Camelids**
  - ⊖ As a group camelids include **alpacas, Bactrian camels (two humped camel), dromedaries, guanacos, llamas, vicuñas** etc.
  - ⊖ Mostly are **herbivorous** and feed primarily but not **exclusively on grasses**.
  - ⊖ **Camelids** play a key role **food security** and livelihoods of communities in **Andean highlands** and in the **arid and semi-arid lands in Africa and Asia**.
    - ◆ Even in extreme climatic conditions they can produce **fibre and nutritious food**.



### Gene Drive Technology

- **Abdoulaye Diabate from Burkina Faso**, recipient of the 2023 Falling Walls Prize for Science and Innovation Management, is developing **Gene Drive Technology to eradicate malaria**.
- In this technology, **genetically modified male mosquitoes**, who cannot produce female offsprings after mating, are **released in the environment**.
  - ⊖ This technology aims to **deplete the female mosquito population**, effectively reducing malaria transmission.
    - ◆ **Malaria** is generally transmitted through the bite of **female Anopheles mosquitoes**, as male mosquitoes do not bite.



### Toll-Operate-Transfer (TOT) Model

- **National Highways Authority of India (NHAI)** has recently awarded highway projects through TOT model.
- **About TOT Model**
  - ⊖ Developed to **encourage private participation** in the Highway sector.
  - ⊖ Under TOT, **operational national highways** are given on **long-term lease (15-30 years)** to private entities on long-term concession basis against upfront payment.
  - ⊖ **During the concession period**, TOT operator collects **user fee on the stretches** under the prescribed rates by NHAI.
    - ◆ **Meanwhile operation and maintenance** of the stretches is to be managed by operator.



### Late Blight Disease

- **Potato crop in Punjab** has suffered extensive damage due to late blight disease.
- **About Late Blight Diseases**
  - ⊖ **Fungal disease** caused by the **fungus Phytophthora infestans** that can damage the entire crop.
  - ⊖ It **affects leaves, stems and tubers of crop**.
  - ⊖ **Water soaked spots** appear on leaves which then increase in size, change to purple brown colour & finally turns black.
  - ⊖ **Infected tubers and the infected soil** may serve as a source of primary infection.
    - ◆ **Air borne infection** is caused by the sporangia.

## Personality in News



### Sakharam Ganesh Deuskar (1869-1912)

- He was remembered on his birth anniversary.
- **Contributions :**
  - ⊖ **A revolutionary journalist** and close associate of **Sri Aurobindo**.
  - ⊖ He was **one of the major architects of the Indian Renaissance**,
    - ◆ Acted as a bridge between Maharashtra and Bengal's Renaissance.
  - ⊖ He published book named **Deshr Katha in Bengali**.
    - ◆ Book was **based on the exploitation of the Indian economy** by colonial British rule.
    - ◆ **Book was translated** into Hindi as **Desh Ki Baat**.
- **Values :** Courage, Commitment to Truth, Patriotism etc.



**Sakharam Ganesh Deuskar (1869-1912)**



AHMEDABAD



BHOPAL



CHANDIGARH



DELHI



JAIPUR



JODHPUR



GUWAHATI



HYDERABAD



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI



SIKAR