DHYEYA IAS
most trusted since 2003

DAILY pre PARE
Current affairs summary for prelims

8 August, 2024

Draft Broadcast Services Bill 2024

Context: *The Broadcasting Services (Regulation) Bill 2024 seeks to replace the Cable Television Networks (Regulation) Act 1995 and regulate news and current affairs broadcasts with new code requirements.*

Key Features

- **Definition of Digital News Broadcasters:**
  - Encompasses publishers of news and current affairs content via online papers, news portals, websites, and social media intermediaries.
  - Excludes replica e-papers.
- **Code of Ethics:**
  - Seeks to uphold the code of ethics from the IT (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021, despite the Bombay and Madras High Courts' stay.
- **Content Evaluation Committee (CEC):**
  - Mandates the formation of CECs to ensure compliance with the content code.
  - Establishes a 3-tier regulation structure: CECs, Self-Regulatory Organisations, and Broadcast Advisory Council.
  - Imposes fines of Rs 50 lakh for initial non-compliance and Rs 2.5 crore for subsequent violations within three years.

Position of OTT Platforms

- OTT platforms are no longer classified under 'internet broadcasting services' but as 'publishers of online curated content' per IT Rules 2021.
- Content on OTT platforms does not include news and current affairs programs.

Expanded Scope of the Draft Bill

- **Sensational News during 2024 Lok Sabha Polls:**
  - Includes independent creators who made sensational claims about the government, necessitating accountability and equal treatment with mainstream media.
- **Content Amplification by Big-Tech Companies:**
  - Addresses concerns over algorithms amplifying certain narratives; tech companies claim algorithms are based on user browsing history.

Inclusion of YouTube Creators and Social Media Accounts

- The 2024 draft extends to social media accounts and online video creators.
- Defines "digital news broadcaster" to include individuals and entities publishing news online.
- Broad definition of "systematic activity" allows extensive government oversight.
- Individual creators are included in the definition of digital news broadcasters.
- Mandates notification to the MIB and formation of CECs at the creator's expense.
- Sets fines up to Rs 2.5 crore for repeated non-compliance with CEC requirements.
- Removes previous threshold for content code obligations, making registration mandatory for all digital news broadcasters.

Requirements for Social Media Companies

- Exempt from liability for third-party content if they provide access without initiating, selecting, or modifying it, except per government orders.
- Must comply with government orders and maintain due diligence.
- Face criminal liability for failing to provide information about OTT and digital news broadcasters.

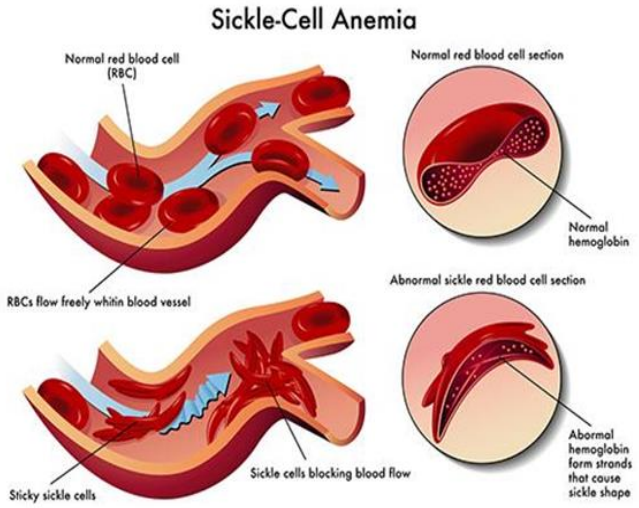
Comparison with Other Countries

- **Singapore**: Regulates both traditional broadcasters and OTT content providers; OTT platforms require a license with fewer obligations than traditional broadcasters.
- **United States:** The FCC regulates broadcast radio and TV; OTT platforms are not directly regulated by federal laws, though some states may have specific rules.

Sickle Cell Anaemia

Context*: As of July 31, Union Health Minister J. P. Nadda informed the Rajya Sabha that 3.85 crore people have been screened for sickle cell anaemia across 17 identified states.*

- **Definition**: Sickle cell anaemia is an inherited disorder that affects red blood cells, causing them to become rigid, sticky, and shaped like sickles or crescent moons, impairing their ability to carry oxygen.



Symptoms

- **Anaemia**: Red blood cells break apart quickly, leading to a shortage of red blood cells and fatigue.

- **Pain Crises:** Severe pain episodes occur when sickle cells block blood flow, which can vary in intensity and duration.
- **Swelling**: Hands and feet may swell due to blocked blood circulation.
- **Frequent Infections**: Damaged spleen raises the risk of infections; vaccines and antibiotics are commonly used for prevention.
- **Delayed Growth or Puberty**: Insufficient red blood cells can slow growth in children and delay puberty in teenagers.
- **Vision Problems:** Blocked blood vessels in the eyes can lead to vision issues.

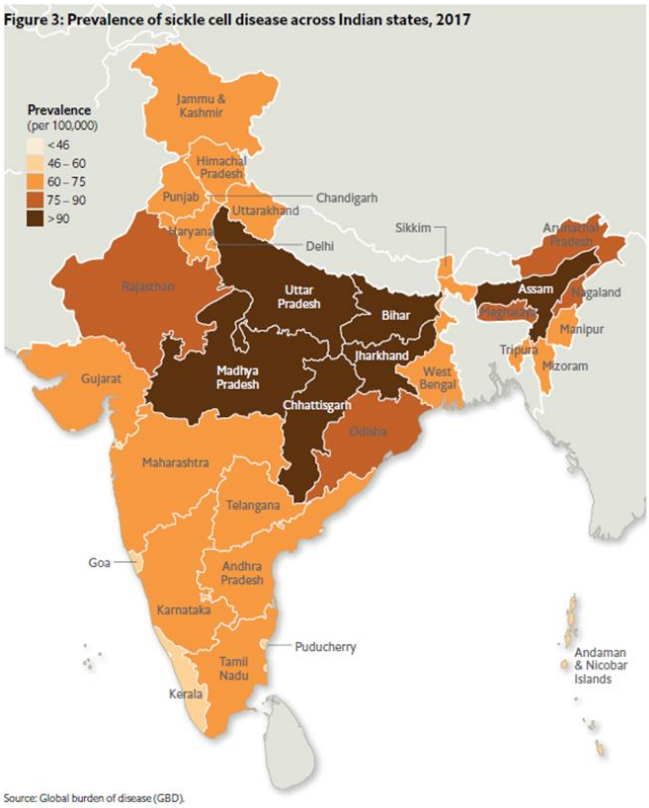
➢ **Causes**

- **Genetic Mutation:** Caused by a change in the gene responsible for producing hemoglobin, leading to misshapen red blood cells.
- **Inheritance**:Sickle cell anaemia is inherited in an autosomal recessive manner.
- **Gene Variants:** Both copies of the gene in each cell must have the variant to cause the disorder.
- **Carrier Parents:** Parents each carry one copy of the altered gene but usually do not exhibit symptoms of the condition.

➢ **Risk Factors**

- **Ethnic Background:** Most common among people of African, Mediterranean, and Middle Eastern descent.

Figure 3: Prevalence of sickle cell disease across Indian states, 2017



Source: Global burden of disease (GBD).

➢ **Complications**

- **Stroke**: Blocked blood flow to the brain can cause severe symptoms and may be fatal.
- **Acute Chest Syndrome**: Life-threatening condition caused by lung infection or blocked blood vessels in the lungs.
- **Avascular Necrosis:** Death of bone tissue due to lack of blood supply, commonly affecting the hip.
- **Pulmonary Hypertension:** High blood pressure in the lungs, usually affecting adults.
- **Organ Damage:** Lack of oxygen-rich blood can damage organs like kidneys, liver, and spleen.
- **Splenic Sequestration: S**ickle cells trapped in the spleen can cause enlargement and pain.
- **Blindness**: Blocked blood vessels in the eyes can lead to vision loss.
- **Leg Ulcers:** Painful sores on the legs.
- **Gallstones**: High bilirubin levels from red blood cell breakdown can lead to gallstones.
- **Priapism**: Painful, long-lasting erections caused by blocked blood vessels.
- **Deep Vein Thrombosis:** Increased risk of blood clots in veins and lungs.
- **Pregnancy Complications:** Higher risk of high blood pressure, blood clots, miscarriage, premature birth, and low birth weight.

➢ **Prevention**

- **Genetic Counseling:** Individuals with the sickle cell trait should consult a genetic counselor before pregnancy to understand risks, treatments, and reproductive options.

Bio-bitumen

Context: *The government will permit mixing lignin up to 35% in petroleum-based bitumen, much of which is imported.*

- **Bitumen Consumption:** India uses 88 lakh tonnes annually, expected to reach 100 lakh tonnes. 50% is imported, costing ₹25,000-30,000 crore.
- **Bio-bitumen:**
  - Sustainable, eco-friendly alternative to petroleum-derived bitumen made from renewable materials like agricultural and forestry residues.
  - Developed from paddy straw, up to 35% can replace conventional bitumen, potentially saving ₹10,000 crore.
- **Lignin Use:** Government to allow up to 35% lignin in bitumen, reducing imports and aiding farmers.

➢ **Production Methods**

- **Pyrolysis**: Decomposes organic material at high temperatures without oxygen, producing bio-oil for bio-bitumen.

- **Hydrothermal Liquefaction:** Converts biomass into liquid under high pressure and temperature, resulting in bio-crude refined into bio-bitumen.
- **Fermentation and Biochemical Processes:** Uses microorganisms to break down biomass into bio-oil, which is then processed into bio-bitumen.

➢ **Benefits in Road Construction**

- **Environmental Sustainability:**
  - **Greenhouse Gas Reduction:** Lower carbon footprint from renewable sources.
  - **Reduced Fossil Fuel Dependency:** Promotes energy security and diversification.
- **Waste Utilization:**
  - **Agricultural Residues:** Utilizes crop residues like straw and husks.
  - **Forestry Waste:** Incorporates wood waste and by-products.
- **Economic Benefits:**
  - **Local Production:** Reduces transportation costs and supports local economies.
  - **Cost-Effective:** Uses waste materials, potentially lowering production costs.
- **Performance and Durability:**
  - **Comparable Properties:** Can match or exceed traditional bitumen in durability, flexibility, and temperature resistance.
  - **Improved Road Quality:** Contributes to better road quality and reduced maintenance costs.

➢ **Role in Reducing Stubble Burning**

- **Stubble Management:**
  - Utilization of Crop Residues: Provides an alternative use for biomass, reducing stubble burning.
  - Economic Incentives: Offers financial benefits for farmers to sell crop residues.
- **Environmental Impact:**
  - Air Pollution Reduction: Decreases stubble burning, improving air quality.
  - Soil Health: Prevents soil degradation from burning, supporting sustainable agriculture.

Feature	Bitumen	Asphalt	Tar
Source and Composition	Derived from crude oil or natural bitumen deposits.	Mixture of bitumen (binder) and aggregates (e.g., sand, gravel).	Produced from the destructive distillation of coal or other organic materials.
Primary Uses	Binder for asphalt, waterproofing, and sealing.	Used primarily in road construction, paving, and roofing.	Historically used for road construction, sealants, and coatings.
Durability and Performance	Provides excellent adhesive and waterproofing properties; resistant to weathering.	Known for high durability, flexibility, and resistance to water, temperature variations, and heavy loads.	Effective adhesive and waterproofing properties, but less durable compared to modern alternatives.
Environmental Concerns	Safer than tar; some concerns related to emissions and disposal.	Generally safe for construction use; concerns include dust and fumes during application.	Contains harmful chemicals and carcinogens; less commonly used due to environmental and health concerns.
Cost	Can be expensive due to crude oil prices and refining costs.	Typically cost-effective due to its combination with aggregates.	Historically cheaper but often replaced due to environmental concerns.
Production Process	Extracted and refined from crude oil; can be modified with additives.	Produced by combining bitumen with aggregates; various mix designs for different applications.	Produced through distillation or pyrolysis; requires special handling due to toxicity.
Health and Safety	Generally safe with proper handling; concerns about fumes during application.	Safe for use in construction; minor health risks from dust and fumes.	Significant health risks; exposure can lead to respiratory problems and other health issues.
Recycling	Can be recycled in asphalt mix; often reused in road maintenance.	Highly recyclable; old asphalt can be reused in new road construction.	Less commonly recycled; not a preferred material due to environmental impact.
Appearance	Typically black or dark brown, viscous or solid form.	Black or dark grey mixture; appears as a solid road surface.	Dark brown to black, often thick and tarry.

DHYEYA IAS
most trusted since 2003

DAILY pre PARE
Current affairs summary for prelims

8 August, 2024

NEWS IN BETWEEN THE LINES

National Stock Exchange

Recently, the National Stock Exchange (NSE) has filed a fresh plea with SEBI to settle a regulatory probe into the misuse of its Trading Access Point (TAP) software with Revised Settlement Terms (RST).

About the National Stock Exchange:

- The National Stock Exchange (NSE) is **one of India's two major stock exchanges**, along with the **Bombay Stock Exchange** (BSE).
- It is a prominent institution in Mumbai, India that was **established in 1992** and has played a key role in the country's financial landscape.
- It is known for its advanced trading technology, including being the **first exchange in India to offer a fully automated electronic trading system.**
- it is focused on investor protection and disciplined development of the Indian capital market landscape.
- It **serves as a platform for buying and selling** a variety of financial instruments, such as equities, derivatives, currencies and debt securities.

Quality Council of India

Recently, the Quality Council of India launched the QCI Surajya Recognition & Ranking Framework to enhance state performance and improve citizens' quality of life.

About the Quality Council of India:

- The Quality Council of India (QCI) is **an autonomous**, **non-profit organization** that was established in **1997** to promote quality and improve the lives of Indian citizens:
- Its main objectives are to establish and operate a **national accreditation structure**, **monitor the National Quality Campaign** and promote quality **through third-party** assessments of products, services and processes.
- This organization was registered under the Societies **Registration Act XXI of 1860**.
- It works in many areas, including **education**, **healthcare**, **environment protection**, **governance**, **social sectors** and infrastructure.
- It is led by a **Chairperson** and **38 members** representing various sectors, including the **government**, **industry associations**, **quality professional bodies** and consumer organizations.
- It has launched the campaign '**Gunvatta Se Atmanirbharta**: **India's Quality Movement'** to celebrate India's quality hubs, raise awareness about the country's significant achievements.

Mullaperiyar Dam

Recently, Congress MPs from Kerala described the century-old Mullaperiyar dam as a "water bomb" in the Lok Sabha, highlighting its threat to lakhs living downstream and sparking a dispute with Tamil Nadu's ruling DMK.

About Mullaperiyar Dam:

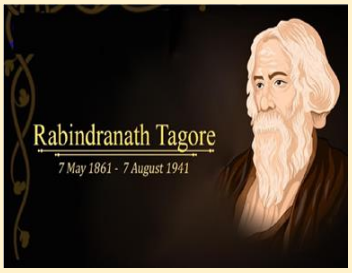
- The Mullaperiyar Dam, a **masonry gravity dam** is located in **Kerala**.
- It was constructed across the **Periyar River** and serves the purpose of diverting water for irrigation and hydroelectric power generation.
- The dam is owned and **operated by the state of Tamil Nadu under a lease agreement** with the erstwhile princely state of Travancore.
- The **lease agreement, signed in 1886,** is a source of contention **between Kerala and Tamil Nadu** due to concerns over dam safety and water sharing.
- The construction of dam began in **1887** was completed in **1895**, making it over a century old.
- It was constructed with **limestone** and "**Surkhi**" (burnt brick powder and a mixture of sugar and calcium oxide).

DHYEYA IAS
most trusted since 2003

DAILY pre PARE
Current affairs summary for prelims

8 August, 2024

Personality in News
Rabindranath Tagore



Yesterday on 7th of August, Gurudev Rabindranath Tagore was remembered on his death anniversary.

Rabindranath Tagore (May 1861-7 August 1941)

Rabindranath Tagore, a polymath, **poet**, **writer**, **composer**, philosopher was born into a prominent **Bengali family in Kolkata**.

Contributions:

- Tagore founded **Visva-Bharati University** in Santiniketan, West Bengal,
- His most celebrated work, "**Gitanjali**: Song Offerings," earned him the Nobel Prize.
- He composed the **national anthems of India ("Jana Gana Mana")** and Bangladesh **("Amar Sonar Bangla").**
- His influence also **inspired Sri Lanka's national anthem.**
- He **composed over 2,230 songs**, known as Rabindra Sangeet and created thousands of paintings.

Awards and Honours:

- Tagore was the **first non-European to win the Nobel Prize in Literature in 1913**, primarily for his work "Gitanjali."
- He was awarded a **knighthood in 1915** by the British Crown, but he **renounced it in 1919 in protest against the Jallianwala Bagh massacre**.

Ethical Values: Intellectual Freedom, spiritual harmony, cultural integrity, etc.

Place in News
Turkiye

Recently, Turkiye filed a request with a U.N. court to join South Africa's lawsuit accusing Israel of genocide in Gaza.

Turkiye (Capital: Ankara)

Location: Turkey is a **transcontinental country** located in both Southeastern Europe and Southwestern Asia.

Boundaries: Turkiye shares it borders with **Azerbaijan and Iran** (East), **Mediterranean Sea** and **Aegean Sea** (Southwest and West), **Black Sea** (North), **Georgia and Armenia** (Northeast) and **Iraq and Syria** (Southeast).

Physical Features:

- **Mount Ararat (Agri Dagi)** is a dormant volcano and the highest point in eastern Turkey.
- **Lake Van** is the largest lake in Turkey.
- **Pamukkale, meaning "cotton castle"** in Turkish, is a natural site in Denizli Province in southwestern Turkey and this area is **famous for a carbonate mineral** left by the flowing of thermal spring water.

POINTS TO PONDER

- Who has been appointed as the full-time Director General of Police (DGP) of the Union Territory of Jammu and Kashmir by the Ministry of Home Affairs (MHA)? **– Rashmi Ranjan Swain**
- Who has been appointed as the Chairman of State Bank of India (SBI) for a period of three years, replacing Dinesh Kumar Khara on August 28? **– C S Setty**
- Which country's copper is being registered for delivery against London Metal Exchange contracts? **– Democratic Republic of Congo (DRC)**
- What aspect of the solar surface did researchers find to be related to the number of sunspots seen during subsequent solar cycle maximum, which can help in forecasting space weather? **– Width of supergranular cells**
- What was one of the reasons behind the sharpest decline in major stock markets across the world recently? **– Yen carry trade**

Face to Face Centres

DELHI MUKHERJEE NAGAR: 9205274741, 42 | **LAXMI NAGAR :** 9205212500, 9205962002 | **RAJENDRA NAGAR:** 9205274743 | **UTTAR PRADESH PRAYAGRAJ:** 0532-2260189, 8853467068 | **LUCKNOW** (ALIGANJ): 0522-4025825, 9506256789 | **LUCKNOW** (GOMTI NAGAR): 7234000501, 7234000502 | **GREATER NOIDA:** 9205336037, 38 | **KANPUR:** 7887003962, 7897003962 | **GORAKHPUR :** 7080847474, 9161947474 | **ODISHA BHUBANESWAR:** 9818244644/7656949029

dhyeyaias.com