2024

DAILY CURRENT AFFAIRS

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GS 2: POLITY, GOVERNANCE, SOCIAL JUSTICE, INTERNATIONAL RELATIONS/INSTITUTIONS

1. SC suggests fresh guidelines to deal with unruly flyers

Context: The Supreme Court has suggested the Director-General of Civil Aviation to consider putting in place more comprehensive guidelines to deal with unruly passengers and fix accountability on flight crews. The court even suggested that the DGCA examine if senior citizens travelling by air could be strategically seated so that they would not fall victim to misbehaviour or be disturbed by others. During a hearing in May last year, the petition referred to statistics tabled in Parliament, which showed that only 63 unruly passengers were put on the "no-fly" lists.

Key points

- **Unruly behaviour:** Unruly behaviour includes, but is not limited to, consuming alcohol or drugs resulting in disruptive behaviour, smoking, not obeying pilot instructions, using threatening or

abusive language, physically threatening or abusive behaviour, intentional interference with crew duties, and endangering aircraft safety.

Levels of Disruptive/Unruly Behaviour - Level 1: Verbal harassment, Physical gestures, Unruly inebriation. Level 2: Physically abusive behaviour, including pushing, kicking, hitting, inappropriate touching, or sexual harassment. Level 3: Life-threatening behaviour, such as damaging aircraft systems, physical violence, or attempting to breach the flight crew compartment.

- **Penalties for Unruly Behaviour:** The airline can impose an immediate ban of up to 30 days. A No-Fly List is maintained by the DGCA based on data shared by airlines. Other carriers can also ban passengers based on the offence level, with varying durations.

- **Rules Governing the Unruly Behaviour:** *The Aircraft Rules, 1937* - The Aircraft Rules, 1937 were formed in pursuance of the Aircraft Act, 1934. The unruly passengers were governed under this Act conjointly read with the Indian Penal Code, 1860. This legislation lays down the ideal behaviour which is expected from the passengers.

  Directorate General of Civil Aviation (DGCA) - The Directorate General of Civil Aviation is the principal regulatory body that primarily governs civil aviation in India. It is responsible for dealing with safety issues, regulation of air transport services, enforcement of civil air rules and regulations and other such tasks.

  Montreal Protocol, 2014 - The Montreal Protocol of 2014 is an amendment to the Tokyo Convention of 1963. It specifically addresses the issue of unruly behaviour on board aircraft. The protocol enhances the legal framework for dealing with offenses and other acts committed on board aircraft.

  - ➢ *Tokyo Convention:* The Tokyo Convention (Convention on Offences and Certain Other Acts Committed on Board Aircraft) was adopted in 1963. It is an international treaty that addresses unlawful acts on board civil aircraft.

- **Way forward:** *Issuance of SOP by DGCA* - Direct the Directorate General of Civil Aviation (DGCA) to issue a comprehensive Standard Operating Procedure (SOP) for better communication and facilitation of passengers during adverse weather conditions. The SOP should focus on minimising passenger discomfort in the event of flight cancellations and delays, providing clear guidelines for airlines, airports, and ground handling agencies.

  Improved Communication Protocols - Establish robust communication protocols between airlines, airports, and passengers to provide timely and accurate information about flight status and delays. Utilise modern communication channels, including mobile apps, SMS, and social media, to keep passengers informed.

  Crew Training on Handling Unruly Passengers - Conduct specialised training programs for airline crews to handle unruly passengers effectively and de-escalate potential conflicts. Enhance crew awareness of legal frameworks and procedures for reporting and managing unruly behaviour.

Q. International civil aviation laws provide all countries complete and exclusive sovereignty over the airspace above their territory. What do you understand by 'airspace'? What are the implications of these laws on the space above this airspace? Discuss the challenges which this pose and suggest ways to contain the threat. (আন্তঃৰাষ্ট্ৰীয় অসামৰিক বিমান আইনসমূহে সকলো দেশক তেওঁলোকৰ ভূখণ্ডৰ ওপৰৰ আকাশসীমাৰ ওপৰত সম্পূৰ্ণ আৰু একচেটিয়া সাৰ্বভৌমত্ব প্ৰদান কৰে। 'এয়াৰস্পেচ "ৰ দ্বাৰা আপুনি কি বুজি পায়? এই আকাশসীমাৰ ওপৰৰ স্থানত এই আইনসমূহৰ প্ৰভাৱ কি? ইয়াৰ ফলত উদ্ভৱ হোৱা প্ৰত্যাহ্বানসমূহৰ বিষয়ে আলোচনা কৰক আৰু ভাবুকি নিয়ন্ত্ৰণৰ উপায়সমূহৰ পৰামৰ্শ দিয়ক।)

2. An ideal way to treat India's corneal blindness problem

Context: Despite strong support for eye donation in India, with millions, including popular film actors, pledging to donate, an acute shortage of corneas persists. There is a need to perform about 1,00,000 corneal transplants every year, but only 30% of this need is being met. On the demand side, many fellow citizens lead a lifetime of avoidable sight loss, waiting for sight-restoring tissue. According to reports, a 'presumed consent' amendment to the Transplantation of Human Organs and Tissues Act (THOTA), 1994, is in the works to allow cornea retrieval from all eligible deaths in hospitals.

Key points

- **Overview:** The Ministry of Health and Family Welfare may amend the Transplantation of Human Organs and Tissues Act (THOTA), 1994, to facilitate retrieval of cornea from all Indian patients who die in hospitals, without consent from the family.
- **World sight day:** It is observed every year on the second Thursday of October. In 2024, it falls on October 14. This day is marked by the International Agency for Prevention of Blindness (IAPB) to raise awareness about vision-related issues and the importance of accessible eye care services globally.
- **Corneal Blindness:** Corneal blindness is a leading cause of blindness among people under 50 years of age. The cornea is the clear, dome-shaped outer layer of the eye that focuses light by refraction onto the retina, enabling vision. Damage to the cornea, from injury, disease, or infection, can impair vision, and the only effective treatment to restore sight is a corneal transplant.

  Impact - Corneal blindness is more prevalent in rural areas and among younger adults and can lead to irreversible blindness if left untreated.

  Challenges - Accessibility to healthcare and disparities in healthcare are significant challenges.

  National Programme for Control of Blindness - This program focuses on corneal blindness and works to stop preventable blindness.
- **Presumed consent:** A way to address the cornea scarcity problem by presuming that a deceased person is a tissue donor unless they have left explicit instructions not to donate.
- **Corneal transplant:** A corneal transplant involves restoring vision to an individual with a damaged cornea by using healthy tissue from a donor. The long-term success of corneal grafts depends on factors such as the quality of donor tissue, the type of corneal condition and follow-up care. Corneal transplants began in 1905, with the first successful transplant in India occurring in 1960. Since then, advances in surgical techniques have led to greater success rates. Surgeons now perform lamellar corneal transplants, where only a specific layer of the cornea is transplanted, rather than the entire cornea. This method leads to quicker recovery and reduces the chances of immune rejection.
- **Lack of donations:** The National Programme for the Control of Blindness and Visual Impairment estimates that over a million people in India suffer from corneal blindness. Despite the demand, the number of corneal transplants performed annually falls far short of the target of 100,000 transplants partly due to challenges in organ donation, such as procedural delays and consent laws. To address this, the government is considering a change to the Transplantation of Human Organs Act, 1994, to allow presumed consent, meaning all eligible donors would be assumed to have given consent, with the family's formal approval.

3. Six decades since Thumba launch, slew of private entities prepare for flight

Context: November 21 marks 61 years since the birth of the Indian space programme. On this date in 1963, scientists launched a Nike-Apache sounding rocket from Thumba in Kerala. These rockets helped the Indian Space Research Organisation (ISRO) master the solid propellant technology powering India's launch vehicles today. Around the same time as this anniversary, India launched its first satellite onboard a SpaceX rocket even as multiple Indian private sector entities geared up for launches of their own. Also, the Departments of Space and of Biotechnology have signed agreements to conduct biological experiments on the forthcoming Bharatiya Antariksh Station; while researchers will be able to conduct experiments on other missions as well, the agreement pertains to experiments onboard the station.

Key points

- **Overview:** India recently launched its first satellite onboard a SpaceX rocket Falcon 9 which carries the 4,700-kg GSAT-N2/GSAT-20 satellite from Florida. This is India's first collaboration with Elon Musk's SpaceX. The satellite belongs to NewSpace India Limited (NSIL), which is the commercial arm of ISRO.

- **Falcon 9:** Falcon 9 is the world's first orbital class reusable, two-stage rocket designed and manufactured by SpaceX for the reliable and safe transport of people and payloads into Earth orbit and beyond.

- **GSAT-20:** GSAT-20 is a high throughput Ka-band satellite that provides high-speed broadband internet connectivity, digital video transmission, and audio transmission. This satellite offers an impressive HTS (High Throughput Satellite) capacity of nearly 48Gbps. Notably, it comprises 32 beams specifically designed to meet the demanding service needs of underserved areas, aiming to bridge the connectivity gap.

- **Significance of the satellite:** Falcon-9 launched the GSAT-N2 into a geosynchronous transfer orbit (GTO), an elliptical orbit with an altitude of around 37,000 km, which is the first step toward reaching a geosynchronous or geostationary orbit (GSO).

- **Types of orbits:** *High Earth Orbit (HEO) -* High Earth Orbit is when a satellite reaches exactly 42,164 kilometres from the centre of the Earth (about 36,000 kilometres from Earth's surface). At this altitude, the satellite enters a sort of "sweet spot" in which its orbit matches Earth's rotation. This special, high Earth orbit is called geosynchronous.

  Medium Earth Orbit (MEO) - Semi-synchronous orbit is a near-circular orbit (low eccentricity) 26,560 kilometres from the centre of the Earth (about 20,200 kilometres above the surface). Molniya orbit is the second common medium Earth orbit.

  Low Earth Orbit (LEO) - Most scientific satellites and many weather satellites are in a nearly circular, low Earth orbit. Just as the geosynchronous satellites have a sweet spot over the equator that lets them stay over one spot on Earth, the polar-orbiting satellites have a sweet spot that allows them to stay in one time.

- **NewSpace India Limited (NSIL):** NSIL, incorporated on 6th March 2019 (under the Companies Act, 2013), is a wholly owned Government of India company, under the administrative control of Department of Space (DOS).

  Functions - Production of Polar Satellite Launch Vehicle (PSLV) and Small Satellite Launch Vehicle (SSLV) through industry, Building of Satellites (both Communication and Earth Observation) as per user requirements, Consultancy services, etc.

4. Between hope and hurdles on the high seas

Context: India's recent signing of the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement better known as the High Seas Treaty has drawn both praise and scepticism from maritime observers. Hailed as a landmark step in ocean governance, the treaty seeks to protect marine ecosystems and promote the sustainable use of resources in areas beyond national jurisdiction. However, despite its laudable intentions to address critical gaps in international maritime regulation, the pact's structural complexities and potential challenges warrant examination. As the third implementing agreement under the United Nations Convention on the Law of the Sea (UNCLOS), the BBNJ treaty follows earlier accords on deep-sea mining and fisheries management.

Key points

- **Biodiversity Beyond National Jurisdiction (BBNJ):** The Blue Leaders High-Level Event on Biodiversity Beyond National Jurisdiction took place in Belgium, encouraging nations to ratify the Marine Biodiversity of Areas Beyond National Jurisdiction (BBNJ) treaty aimed at protecting the high seas from pollution, climate change, and overfishing.
- **About the treaty:** The BBNJ treaty commonly referred to as the Treaty of the High Seas was agreed upon in March 2023 for the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction.
- **Ratification Progress:** The treaty aims to address the challenges faced by the high seas, which constitute areas beyond 200 nautical miles from the exclusive economic zones of coastal countries. So far, 88 countries have signed the treaty, with Chile and Palau being the only two to have ratified it.
- **Objectives:** The treaty seeks to increase the percentage of protected areas on the high seas, which currently stands at a mere 1.44%, despite covering more than two-thirds of the global ocean. Additionally, it aims to ensure fair and equitable sharing of profits from marine genetic resources (MGR) and establish rules for conducting Environmental Impact Assessments (EIA), which deal with identifying and evaluating the potential impacts an activity could have on the ocean. This aligns with the 30x30 target, it is a global commitment to protect at least 30% of the planet for nature by 2030. It was agreed upon at the Convention on Biological Diversity (CBD) at the Conference of Parties (COP15) to the UN Convention on Biological Diversity in 2022 and is included in the Kunming-Montreal Global Biodiversity Framework.
  - *Environmental Impact Assessment (EIA)* - Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development, considering inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse.
- **Challenges:** Despite widespread support for the treaty, concerns persist regarding potential delays in ratification, echoing past challenges faced by similar international agreements like the United Nations Convention on the Law of the Seas. Additionally, operationalising the treaty poses logistical hurdles, including defining procedural frameworks and securing adequate funding.
- **Way forward:** Efforts towards the treaty's entry into force and subsequent implementation require concerted global collaboration. The upcoming United Nations Ocean Conference in 2025 is identified as a crucial platform for advancing these objectives.

5. Milk production up 4 pc to record 239.3 MT in FY24, despite fall in output of buffaloes

Context: India's milk production rose nearly 4 per cent annually to 239.3 million tonnes in 2023-24 on better productivity, even as milk output of buffaloes declined 16 per cent annually. However, the annual growth rate has slowed down in the previous two fiscal years, the data showed. The growth rate was 6.62 per cent in 2017-18; 6.47 per cent in FY19; 5.69 per cent in FY20; 5.81 per cent in FY21; and 5.77 per cent in FY22. In FY23 it came down to 3.83 per cent and 3.78 per cent in FY24.

Animal Husbandry and Dairying

- **Achievements in Animal Husbandry and Dairy:** *Livestock Sector* - Livestock sector contributes significantly to the Indian economy, with a compound annual growth rate (CAGR) of 7.93% from 2014-15 to 2020-21. The livestock sector's contribution to the total agriculture and allied sector Gross Value Added (GVA) has increased from 24.38% in 2014-15 to 30.87% in 2020-21.
  Dairy Sector - Dairy is the largest agricultural commodity in India, contributing 5% to the national economy and employing over 8 crore farmers directly. India ranks 1st in milk production, accounting for 23% of global milk production.
  Egg and Meat Production - India ranks 3rd in egg production and 8th in meat production globally. Egg production has increased from 78.48 billion in 2014-15 to 129.60 billion in 2021-22, growing at a rate of 7.4% per annum. Meat production has risen from 6.69 million tonnes in 2014-15 to 9.29 million tonnes in 2021-22.
- **Initiatives Taken to Enhance the Livestock Sector:** *Rashtriya Gokul Mission* - Nationwide Artificial Insemination Programme: Over 5.71 crore animals covered, benefiting 3.74 crore farmers. Promotion of IVF Technology: Production of viable embryos and birth of calves. National Digital Livestock Mission: Enhance livestock productivity, control diseases, and ensure quality for domestic and export markets.
  National Livestock Mission - Direct subsidies to individuals, FPOs, and others to establish poultry farms, sheep and goat breed multiplication farms, piggery farms, and feed and fodder units.
  Kisan Credit Cards (KCC) for Dairy Farmers - More than 27.65 lakh fresh KCCs sanctioned for AHD farmers in milk cooperatives and milk producer companies.
- **Challenges:** Disease management and animal health issues. Availability and quality of feed and fodder. Lack of modern infrastructure and technology. Shortage of skilled personnel and veterinary services. Financial constraints and limited access to credit. Marketing and distribution challenges.
- **Way Forward:** Strengthen veterinary services and infrastructure, promote vaccination programs and regular health check-ups, and enhance disease surveillance and early detection systems for livestock. Promote cultivation of high-quality fodder crops, encourage adoption of modern techniques like hydroponics and silage production, and establish feed processing units for a consistent supply of quality feed.