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Table of Content

- Australian Parliamentary Report Over Child Labour in India
- Potential of India's online gaming sector
- NASA Creating a Standard Time for the Moon
- First Joint Committee Meeting (JCM) between India and Australia

NEWS IN SHORTS

- Indian Ocean Dipole (IOD)
- West Nile Fever
- Drip Pricing
- Tactical Nuclear Weapons
- CRISPR-Cas9 treats inherited blindness
- MEDITECH STACKATHON 2024

AUSTRALIAN PARLIAMENTARY REPORT OVER CHILD LABOUR IN INDIA

Context

- An Australian parliamentary committee in its report has raised concerns over child labour in India referring to Australia-India Economic Cooperation and Trade Agreement.

About

- The report has pointed out that Australia's trade agreement with India does not recognise international labor rights.
- India has a well-documented presence of child and (forced) labor, making significant contributions to the population of the world in modern slavery.

What is Child Labour ?

- **The International Labour Organization (ILO)**, defines child labour as work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development.

Child Labour in India

- India is home to about **1.01 crore** working children between the age of **five** and fourteen years, as per **2011 census**.
- As per an Indian parliamentary standing committee report, **Bihar, Uttar Pradesh, Rajasthan, Madhya Pradesh and Maharashtra**, employ over half of India's child labour.
- While the incidence of child labour declined between 2001 and 2011, it is more visible in rural areas due to migration.

Causes of Child Labour in India

- Many families in India live **below the poverty line**, and children often have to work to supplement their family income.
- In some cases, families become trapped in **debt bondage**, where they are forced to send their children to work to repay loans. This perpetuates a cycle of exploitation and poverty.
- **Conflict situations** and mass migrations, whether due to internal strife, natural disasters, or economic instability, disrupt families and expose children to the harsh realities of labor.

- **The demand for cheap labour** in various industries, including agriculture, manufacturing, and domestic work, perpetuates child labour.

Constitutional Provisions against Child Labour

- **Article 23** prohibits traffic in human beings, begar (forced labor) and other similar forms of forced labor.
- **Article 24** prohibits the employment of children below the age of 14 years in any factory, mine or other hazardous activities.
- **Article 21-A** provides free and compulsory education for all children in the age group of six to fourteen years.

Steps taken by government

- **Child Labour Act (Prohibition and Regulation) 1986:** It prohibits children under the age of 14 years to be working in hazardous industries and processes.
- **National Child Labour Project (NCLP) Scheme:** Under the scheme children in the age group of 9-14 years are rescued from work and provided with education, vocational training, mid-day meal, stipend, health care, etc.
- **PENCIL (Platform for Effective Enforcement of No Child Labour) Portal:** It is an electronic platform that aims at involving Centre, State, District, Governments, civil society and the general public in achieving the target of child labour free society.
- **ILO conventions on child labour:** In 2017 **India ratified** ILO Conventions **No. 138** on Minimum Age to Employment and **No. 182** on the Worst Forms of Child Labour.

International Measures

- **The United Nations made 2021** the International Year for the Elimination of Child Labour, calling for urgent action needed to meet a goal of ending the practice by 2025.
- **Target 8.7 of the Sustainable Development Goals (SDGs):** Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour.
 - ♦ **ALLIANCE 8.7**, an inclusive global partnership is committed to achieving Target 8.7 of SDGs.

Way Ahead

- Critics argue that Immediate imposition of international labor standards would lead to reduction in the total economic welfare worldwide in developing nations as well as developed nations.
- However trade should not be a 'race to the bottom on workers' rights' and inclusion of enforceable labor rights is important in setting a level playing field to ensure that companies cannot just locate themselves in jurisdictions with lower wages and conditions.

Source: IE

POTENTIAL OF INDIA'S ONLINE GAMING SECTOR

Context

- The Prime Minister's vision to establish India as a prominent global gaming hub has received renewed attention as he engaged with seven of the top gamers in the country.

India's online Gaming Industry

- India is one of the largest gaming markets in the world. It is predominantly a home-grown start-up ecosystem growing at **27% Compound annual growth rate (CAGR)**.
- The Indian gaming industry's **revenue** stands at **3.1 billion dollars** in the financial year **2023**.
- It is widely estimated that AI and online gaming can add up to **\$300 billion** to India's **GDP by 2026-27**.

Potential of Gaming Industry

- The sector attracts significant **foreign and domestic investments** along with direct and indirect employment. Leveraging India's IT prowess, the industry holds natural potential for India.
- The size of the global gaming industry crossed **\$300 billion in 2021**, still the online gaming segment in India constitutes **1.1%** of the global online gaming revenue.

Government Initiatives to promote online gaming

- **Digital Gaming Research Initiative:** The government has started a digital gaming research initiative, and the **SERB-INAE Conclave** was organized recently to support the Indian digital gaming research space and industry.

- **The Science and Engineering Research Board (SERB) of the Department of Science and Technology** has identified three main directions for its Digital Gaming Research Initiative;

- ♦ R&D in learning and leisure gaming platforms,
- ♦ immersive game prototypes with an emphasis on Indian culture and values, and
- ♦ a collaborative technical design process, which was made by SERB Game Labs.

- **AVGC Promotion Task Force:** The Ministry of Information and Broadcasting has established the Animation, Visual Effects, Gaming and Comic (AVGC) Promotion Task Force.

- ♦ The government recognizes that the Indian AVGC industry has the ability to carry the "Make in India" and "Brand India" banners.

Regulation of Industry

- At present, there is **no uniform federal law** regulating the skill gaming industry in India.
- The **Public Gambling Act, 1867** and **Prize Competitions Act, 1955** currently govern India's online gaming industry at the federal level while varying legislation in different Indian states supersede these Acts.
 - This is because **state governments** in India are empowered by the constitution to **legislate on gambling**.
- Recently the government decision to appoint the **Ministry of Electronics and Information Technology (MeitY) as the nodal ministry** for online gaming in India has finally provided **legitimacy to the sector**.
- The government will shortly draft **regulations for intermediaries in the online gambling industry and initiate a public consultation process**.

Challenges

- The rise of online gaming has brought many concerns such as **addiction, mental illness, suicides, financial frauds, privacy and data security** concerns.
- The situation is further exacerbated by the growth of **illegal offshore gambling** and betting markets wherein the volume of digital transactions provides fertile ground for financial malpractices.
- No mechanism exists for individuals to differentiate between legitimate gaming platforms and illegal gambling/betting sites.

- ◆ In addition, in the **absence of a specialized regulatory authority**, enforcement is lacking.
- **The Goods and Services Tax Council** decided to enforce a tax rate of **28%** on the total face value of bets which was earlier 18%.
 - ◆ The measure has raised concerns about the industry's sustainability in the long term and its consequential impact on jobs being created in this sector.

Way Ahead

- India stands at a distinctive juncture to emerge as a prominent global gaming hub. Also India has the advantage of tapping its rich cultural heritage (stories, legends, and folklore).
- As perceptions about gaming as a viable career option evolve, India stands to benefit from a growing pool of talented individuals driving innovation and pushing boundaries in the gaming landscape.
- By fostering an enabling environment for skill gaming, promoting diversity and inclusion, and capitalizing on its rich cultural narratives, India can not only realize its vision of a **\$1-trillion digital economy** but also shape the future of gaming on a global scale.

Source: TH

NASA CREATING A STANDARD TIME FOR THE MOON

In News

- The White House directed NASA to establish a **Coordinated Lunar Time (LTC)** to standardise cislunar operations with the universal time followed on Earth.

Coordinated Lunar Time (LTC)

- The LTC will be the standard to measure cislunar operations — **space activities between the moon and Earth** — with **Coordinated Universal Time (UTC)**, the global time used to regulate time on Earth.
- NASA has been directed to engage with the 39 nations who have signed the **Artemis Accords** for this project.
 - ◆ The White House has set a deadline of December 31, 2026, for NASA and its international partners to deliver a strategy to implement LTC.

Key Points

- The White House's Celestial Time Standardization policy seeks to assign a time standard to each celestial body and its surrounding space environment, first focusing on the **lunar surface** and missions **operating in cislunar space**.
- It outlines the four features such a time standard must possess:
 - ◆ **Traceability to UTC:** Lunar Time is analogous to Terrestrial Time on Earth (TAI+ 32.184 seconds). Similar to Terrestrial Time, Lunar Time may be set through an ensemble of clocks on the moon.
 - This time standard, i.e., LTC may directly employ or distribute the UTC offsets required to maintain both local time and UTC time within tolerance limits.
 - ◆ **Scalability beyond the Earth-Moon system:** Conversion of LTC to UTC for operations involving interactions with Earth will be possible by using the above approach to set the LTC.
 - This approach is also extensible to space environments beyond the Earth-Moon system (for example, for Mars).
 - ◆ **Accuracy for precision navigation and science:** The LTC will give users in cislunar space a reference time standard near the gravitational environment in which they operate.
 - Space assets can synchronise with each other with precision for navigation.
 - ◆ **Resilience to loss of contact with Earth:** The reference time – LTC – must survive independently when contact to Earth is lost.

Do you know ?

- The idea for the **UTC was formulated in the 1960s**.
- The UTC was designed as a way to **accommodate the difference between solar time and atomic time**, and is kept within 0.9 seconds of solar time to follow Earth's rotation variations and within an exact number of seconds of the International Atomic Time (TAI).
- Currently, moon missions follow the time of the country which operates the spacecraft, while the **International Space station (ISS) runs on the UTC**.
- However, a standardised time for space and the moon is not followed.

Why is LTC needed?

- UTC cannot be used to determine time on the Moon. That is because time on the Moon flows differently than it does on the Earth.
 - ◆ On Earth, we use a 24-hour day based on the planet's rotation.
 - However, the moon rotates much more slowly – every 29.5 Earth days.” Due to its slow rotation, it would be practical to have less than **Earth's 24 time zones**
- Previous moon missions involved astronauts visiting the lunar surface, completing their work and flying home.
- However, with space agencies across the world aiming to establish a permanent human presence on the moon, LTC is required,
- The pressing need for LTC is due to the plan to create a **dedicated global satellite navigation system (GNSS) for the moon by 2030**.
 - ◆ This system will function similar to how the Global positioning system (GPS) and other navigation networks work on Earth.
- Moon missions of various agencies will need an official lunar time to communicate with Earth-based stations and each other.
- **Commercial operations** on lunar surface involving transactions and logistics will be more reliable with the LTC

Issues in defining and implementing LTC

- The process of defining lunar time is complicated by the effect of the moon's gravitational pull.
- As per special relativity theory, due to the weaker gravitational pull of the moon, a clock on the moon would run faster than one on Earth.
- A clock's speed would also change depending on its position on the lunar surface, because of the moon's rotation,

Global Progress

- In November 2022, the need for a unified lunar time was voiced globally by space agencies and academic organizations at an ESA meeting in the Netherlands.
- In 2023, the European Space Agency (ESA) launched a project called '**Moonlight**' to design satellites for astronauts and robotic explorers, which will be used to support NASA's moon mission 'Artemis.'

- ◆ While working on the project, questions arose on **setting a single time zone for the moon and how to go about it**.
- Several countries have lunar ambitions.
 - ◆ China has stated that it will put its astronauts on the moon by 2030, while
 - ◆ India plans to land in 2040.
 - ◆ In January, Japan became the fifth country to land a spacecraft on the moon, after the US, Russia, India and China.
 - However, India is the only one to land a spacecraft near the lunar south pole.

Future Outlook

- In September 2025, NASA's four-member Artemis crew is scheduled to fly around the moon in preparation for the space agency's mission to land on the moon again.
 - ◆ To boost such scientific missions, there is a need to establish a Coordinated Lunar Time (LTC) to standardise cislunar operations with the universal time followed on Earth.
- A consistent definition of time among operators in space is critical to successful space situational awareness capabilities, navigation, and communications.

Source:TH

FIRST JOINT COMMITTEE MEETING (JCM) BETWEEN INDIA AND AUSTRALIA

Context

- India and Australia during the first Joint Committee Meeting (JCM) under the Economic Co-operation and Trade Agreement (ECTA), have agreed to several key initiatives.

Key Highlights

- The JCM under **India-Australia Economic Co-operation and Trade Agreement (Ind-Aus ECTA)** intends to serve as a vital platform for both the nations to further strengthen economic cooperation.
- Both the nations committed to creating an institutional mechanism for sharing **preferential import data** and exploring innovative areas to ensure the successful completion of the **Comprehensive Economic Cooperation Agreement (CECA)** negotiations.

- The JCM meeting also addressed certain critical services issues, including the consideration of India's request for facilitation of **cross border e-payments** and **mutual recognition agreements** in professions like nursing and dentistry.

India-Australia Economic Co-operation and Trade Agreement (Ind-Aus ECTA)

- The Ind-Aus ECTA provides an institutional mechanism to encourage and improve trade between the two countries.
 - It entered into force on **29 December 2022**.
- India will benefit from preferential market access provided by Australia on 100% of its tariff lines, including all the labor-intensive sectors of export interest to India.
- On the other hand, India will be offering preferential access to Australia on over 70% of its tariff lines, including lines of export interest to Australia, which are primarily raw materials and intermediaries such as coal, mineral ores and wines.

India-Australia Economic Cooperation

- Australia is an important trading partner of India in the Oceania region and the merchandise trade between them is reaching around **\$24 billion in 2023-24**.
- FDI from Australia during January-September 2023 was **\$307.2 million**, seven times the \$42.43 million received in the whole of 2022.
 - FDI in consultancy services was **\$248 million** from **\$0.15 million** in 2022.
- In FY23, India was Australia's 9th largest trading partner, and Australia was India's 13th largest trading partner.
- Trade between India and Australia is expected to cross **\$45-50 billion by 2035**.

Way Ahead

- India and Australia are Indo-Pacific partners with a shared vision for a resilient, inclusive, open region.
- Both nations are part of the **Quad group** and the 14-member **Indo-Pacific Economic Framework for Prosperity (IPEF)**. Both have joined the trilateral **Supply Chain Resilience Initiative (SCRI)** along with **Japan**.
- In recent times, investor-friendly policies and game-changing reforms has made India an even more attractive destination for Australian businesses.

Source: **PIB**

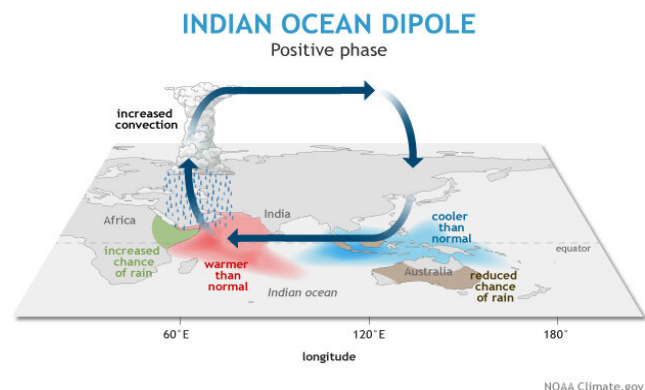
NEWS IN SHORT

INDIAN OCEAN DIPOLE (IOD)

In News

Positive Indian Ocean Dipole (IOD) or Indian Nino may re-emerge for the second consecutive year in the **latter half of 2024**.

- It is for the first time since 1960 that the event is recurring for a second consecutive year since record-keeping began.



About Indian Ocean Dipole (IOD)

- It is a climate pattern affecting the Indian Ocean and it results in irregular oscillations of sea surface temperatures.
 - During a positive phase, **warm waters are pushed to the Western part** of the Indian Ocean, while cold deep waters are brought up to the surface in the Eastern Indian Ocean.
 - This pattern is reversed during the negative phase of the IOD.
- Impact:** The IOD influences the local weather causing heavy rains and/or droughts in **Africa and Australia**.
 - The associated sea-level changes can also lead to increased threats of coastal flooding and associated impacts.
 - A positive IOD can help rainfall in the Indian subcontinent and along the African coastline, while reducing rainfall in Australia, south-east Asia, and Indonesia.
- How it affects India :** A positive IOD can boost the performance of India's southwest monsoon, depending on when it develops.
 - For example, in 2019, a strong IOD event that developed during the late monsoon season compensated for a 30 per cent rainfall deficit in June

- The development IOD will likely boost the Indian agriculture sector.
- Also, it is likely to recharge reservoirs and other water sources, where the storage level is precarious.

Source:BL

WEST NILE FEVER

Context

- Kerala's health department has reported **West Nile fever cases**.

About

- West Nile Virus (WNV) is a member of the **flavivirus genus** and belongs to the Japanese encephalitis antigenic complex of the family **Flaviviridae**.
- The **single-stranded RNA virus originates in birds** and is propagated via the bite of infected **Culex mosquitoes among humans and animals**.
 - The chances of human-to-human transmission are low.
- It mostly **impacts adults** and was first **detected in Uganda in 1937**. In Kerala, it was first detected in 2011.
- The WNV can cause a **fatal neurological disease in humans**, however, most of the persons who are infected by it may not show any symptoms.
- WNV is **majorly found** in Africa, Europe, the Middle East, North America and West Asia.
- There is **no vaccine** available for the infection caused by the West Nile virus.

Source: TM

DRIP PRICING

Context

- Recently, the **Department of Consumer Affairs** (under the Union Ministry of Consumer Affairs) warned about '**drip pricing**' saying it can surprise consumers with '**hidden charges**'.

Drip Pricing

- It is a **pricing strategy and a technique** where only a part of an item's price is advertised, with the total amount revealed at the end of the buying process.

- It refers to the practice of **advertising a basic price** at the outset and then **incrementally disclosing additional costs** associated with the product or service.

- It is commonly used in the **hospitality and travel markets**.

Impact on Consumers

- The price listed in a newspaper advertisement, in an email, or on a website (the 'headline price') may not be what a good or service ultimately costs the consumer.
- Drip pricing can make comparison shopping more difficult and penalize sellers who are more transparent with their pricing.

Source: HT

TACTICAL NUCLEAR WEAPONS

Context

- Recently, Russia conducted tactical nuclear weapons drills near Ukraine.

Tactical Nuclear Weapons (aka non-strategic nuclear weapons)

- These are a type of nuclear weapon **designed for use on the battlefield** during military operations.
- Unlike strategic nuclear weapons, which are designed to destroy large areas and population centers, tactical nuclear weapons are **intended for smaller, more immediate military objectives**.
- These are often mounted on missiles, air-dropped bombs, or even artillery shells that have a relatively short range, far less than the huge intercontinental ballistic missiles (ICBMs).
- Unlike strategic nuclear weapons, **tactical nuclear weapons have never been limited by arms control agreements** between major powers like Moscow and Washington.

Countries with Tactical Nuclear Weapons

- Many of the world's nuclear powers have weapons that are considered **low-yield or meant to be used on the battlefield**.
- According to a report, the United States has approximately 230 non-strategic nuclear weapons, including about 100 B61 bombs deployed with aircraft in Europe.
- Russia has 1,000 to 2,000 warheads for non-strategic nuclear weapons in its arsenal.

Source: TOI

CRISPR-CAS9 TREATS INHERITED BLINDNESS

Context

- Scientists have used a human gene editing tool, CRISPR-Cas9, to restore vision in people with a rare form of inherited or congenital blindness.

About

- The trial was called “**BRILLIANCE**” and people who had a rare form of inherited blindness, known as **Leber congenital amaurosis (LCA)**, participated in it.
- **The LCA** is caused by a gene mutation that prevents a protein, CEP290, from functioning properly which is critical for sight.

CRISPR-Cas9

- **Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)** is a DNA sequence which is part of the bacterial defense system.
- **Cas9 (CRISPR-associated)** is the name of the protein that transfers resistance.
 - ♦ It is an enzyme that acts like a pair of **molecular scissors**, capable of cutting strands of DNA.
 - ♦ It allows researchers to easily alter DNA sequences and modify gene function.
- In 2020, **Emmanuelle Charpentier** and **Jennifer A. Doudna** was awarded the Nobel Prize in chemistry for discovering CRISPR-Cas9.

Source: IE

MEDITECH STACKATHON 2024

Context

- The Department of Pharmaceuticals launched the **MEDITECH STACKATHON 2024** in collaboration with **Confederation of Indian Industry (CII)**.

About

- The Stackathon was aimed to address **critical challenges**, foster domestic manufacturing, and reduce import dependence, thereby positioning India as a global leader in medical technology.
- At present India ranks as the 4th largest market for medical devices in Asia and stands among the top 20 globally.
- India's MedTech industry is set to reach USD 50 bn by 2030 from the current USD 14 billion.

Confederation of Indian Industry (CII)

- It is a **non-government, not-for-profit, industry-led and industry-managed business association organization** playing a proactive role in India's development process.
- Founded in **1895**, CII has members from the private and public sectors.
- CII suggests change by working closely with governments and thought leaders and enhancing efficiency, competitiveness and business opportunities for industry.

Source: PIB

