

DAILY CURRENT AFFAIRS (DCA)

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PANEL TO EXAMINE ISSUES FACED BY QUEER COMMUNITY

Context

- The Ministry of Law and Justice notified a six-member committee to address issues related to the queer community.

Background

- In 2023, the Supreme Court dismissed a plea to legalize **same-sex marriages**, asserting that the right to marry is not a fundamental right and falls under the purview of legislative regulation in accordance with societal norms.
- However, the Court directed the government to establish a high-powered committee to thoroughly examine all relevant factors pertaining to the queer community.

Queer community

- The queer community is an inclusive and diverse group of people who identify as lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual, or any other sexual orientation, gender identity, or expression that falls outside of societal norms.

Challenges faced by Queer Community

- Discrimination and ostracisation:** They face discrimination in employment, educational institutes, and within families which severely affects their overall wellbeing.
- Identity crisis:** They are often forced to identify with a gender with which they are not associated at the workplace despite the government passing the Transgender Persons (Protection of Rights) Act, 2019 which allows the community the right to self-perceived gender identity.
- Social Stigma:** They often face difficulty in property inheritance or child adoption. Because of being socially ostracised, they are compelled to take up menial jobs despite good qualifications or forced into sex work.
- Health Disparities:** Queer individuals often face disparities in healthcare access and quality, as well as specific health concerns such as higher rates of mental health issues, substance abuse,
- Lack of public amenities:** They face issues with the accessibility of public toilets and public spaces. They often face problems in prisons, hospitals and schools.

Various Judgment related to LGBTQ+

- The ruling in **National Legal Services Authority (NLSA) v. Union Of India (2014)** famously known as the NALSA Case, has following implications;
 - The Court directed Centre and State Governments to grant legal recognition of gender identity whether it be male, female or third-gender.
 - Recognising third gender persons as a "socially and educationally backward class of citizens", entitled to reservations in educational institutions and public employment.
- Navtej Singh Johar v. Union of India (2018):** The Supreme Court, in the verdict, struck down parts of **Section 377**, effectively **decriminalizing consensual homosexual** acts between adults. The court recognized the rights of LGBT individuals to equality, privacy, and dignity.

Initiatives taken by government

- Transgender Persons (Protection of Rights) Act, 2019:** The law passed by the Parliament aims to end discrimination against transgender persons in accessing education, employment and healthcare and recognise the right to self-perceived gender identity.
- National Council for Transgender Persons:** In pursuance of the **Transgender Persons (Protection of Rights) Act, 2019**, the National Council for Transgender Persons has been constituted to advise the Central Government on the formulation and evaluation of policies, programmes, legislation and projects for the welfare of the transgender community.
- National Portal for Transgender Persons:** The Ministry of Social Justice and

Empowerment launched the National Portal for Transgender Persons in **2020**.

- Any Transgender applicant can **obtain a certificate of identity** and identity card without any physical interface with the office of issue.
- Garima Greh:** The scheme aims to provide shelter to Transgender persons, with basic amenities like shelter, food, medical care and recreational facilities.

Conclusion

- While there has been significant progress in advancing LGBTQ+ rights and reducing discrimination, there are still many challenges to address.

- Continued advocacy, education, and policy change are necessary to ensure full equality and acceptance for the LGBTQ+ community worldwide.

Source: TH

UTTAR PRADESH'S PROHIBITION OF UNLAWFUL CONVERSION OF RELIGION ACT, 2021

Context

- The Allahabad High Court **refused to quash an FIR against a Muslim man** in an **interfaith live-in relationship**, citing **Uttar Pradesh's Prohibition of Unlawful Conversion of Religion Act, 2021**.

Uttar Pradesh's Prohibition of Unlawful Conversion of Religion Act, 2021

- UP anti-conversion law prohibits the **religious conversion of a person** by the use of **"misrepresentation, force, undue influence, coercion, allurement or by any fraudulent means"**.
 - ♦ **Conversion by solemnization of marriage or relationship** would also qualify as **illegal conversion under the Act**.
- Section 4 of the law states that **"Any aggrieved person" or their relatives** can **lodge an FIR for illegal conversion**.
- **Punishment:** The standard punishment is 1-5 years imprisonment, and a fine of at least Rs. 15,000.
 - ♦ If the victim is a woman, a minor or a person belonging to a Scheduled Caste or Scheduled Tribe, the punishment increases to 2-10 years with a fine of at least Rs. 25,000.
 - ♦ In cases of mass conversion, the punishment becomes 3-10 years, and a fine of at least Rs. 50,000.
- **Process for Conversion:** This requires the person converting to **submit two declarations to the District Magistrate**.
 - ♦ The first declaration must contain a statement that the individual wishes to convert their religion without any force, coercion, undue influence, or allurement.
 - ♦ The Magistrate will then ensure that a police enquiry is conducted to **determine the "real intention" of the religious conversion**.

- ♦ The second declaration will include details such as date of birth, permanent address, father/husband's name, prior religion, religion to which the individual is converting, and the details of the conversion ceremony.
- ♦ After the second declaration is submitted, the District Magistrate will post a copy of it to the notice board, for the **public to record objections to the conversion, if any**.

Arguments in Favour of the Law

- **Prevention of Forced Conversions:** The primary objective of the Act is to prevent forced conversions carried out through coercion, fraud, or allurement.
 - ♦ Such conversions often exploit vulnerable individuals, particularly women and members of marginalized communities, and the law is necessary to protect their rights and autonomy.
- **Preservation of Social Harmony:** Regulating religious conversions helps to maintain social harmony and prevent tensions between different religious communities.
- **Deterrence Against Conversion Rackets:** The Act serves as a deterrent against conversion rackets and fraudulent religious organizations that exploit individuals for financial or other gains.
- **Promotion of Religious Freedom with Responsibility:** The Act is viewed as a balanced approach to safeguarding religious freedom while preventing abuses and ensuring that conversions are conducted ethically and transparently.
- **Backing from Public Opinion:** The enactment of the law reflects the sentiments and concerns of a significant portion of the population in Uttar Pradesh, where issues related to religious conversions have been contentious.

Arguments Against the Law

- **Constitutional Concerns:** The law violates fundamental rights guaranteed by the Indian Constitution, such as the right to freedom of religion and the right to privacy.
 - ♦ The state does not have the authority to regulate an individual's choice of religion.
- **Ambiguity in Definitions:** The Act has been criticized for its vague and ambiguous definitions of terms such as "coercion," "fraud," and "allurement," which can lead to arbitrary interpretation and misuse by law enforcement agencies.

- **Impact on Interfaith Relationships:** The law could be misused to target interfaith couples, particularly those involving Hindu-Muslim relationships, by accusing one party of converting the other through coercion or fraud.
- **Burden of Proof:** The Act places the burden of proof on the accused, requiring them to prove that conversion was not done through coercion, fraud, or allurement.
 - ♦ This reversal of burden of proof is seen as unfair and against the principles of natural justice.
- **Social Polarization:** The enactment of such laws has the potential to exacerbate social tensions and polarize communities along religious lines, leading to increased communal disharmony.

Way Ahead

- Despite these challenges and criticisms, the Uttar Pradesh government has defended the law, arguing that it is **necessary to prevent forced conversions and protect the rights of individuals** to practice their religion freely.
- The ultimate resolution of these challenges may depend on **judicial interpretation and potential amendments to the Act.**

Source: IE

FDI IN INDIA'S SPACE SECTOR

Context

- Recently, the Union Finance Ministry notified new rules backing Foreign Direct Investment (FDI) for the space sector under the Foreign Exchange Management Act (FEMA).

India and Space Sector

- The Indian Space Economy is estimated at around \$8.4 billion (around 2-3% of global space economy).
 - ♦ India has privatised space launches and is targeting a five-fold increase in its share of the global launch market.
- **Budgetary Allocation:** The Department of Space has received **a nominal hike of 4%** in its allocation in the Interim Union Budget for 2024-25, from ₹12,545 crore to ₹13,043 crore.
 - ♦ It is expected that with the implementation of the Indian Space Policy 2023, \$44 billion Indian space economy can be achieved by the year 2033.

- The number of **Space Start-Ups** have gone up, from just 1 in 2014 to 189 in 2023 as per DPIIT Start-Up India Portal.

- ♦ The investment in Indian Space Start-Ups has increased to \$ 124.7 Million in 2023.

Key Initiatives

- **Indian Space Policy 2023:** It laid down roles and responsibilities of organisations such as ISRO, **New Space India Limited (NSIL)** and private sector entities.
 - ♦ It aims to enhance the participation of research, academia, startups and industry.
- **Strategic Proposals by SIA:** The Space Industry Association – India (SIA-India) in its Pre-Budget Memorandum for the **FY 2024-25** has proposed a substantial increase in India's space budget.
 - ♦ It aims to support India's expanding space program, foster private sector involvement, drive technological advancements, and position the nation as a key player in the dynamic global space ecosystem.
- **Tax Incentives:** It needs to take more initiatives for tax exemptions/tax holidays/accelerated depreciation for companies directly or indirectly engaged in space sector activities.

FDI in Space Sector

- The Finance Ministry came with new rules, known as the **Foreign Exchange Management (Non-debt Instruments) (Third Amendment) Rules, 2024**, that provide **a liberalised entry route** for FDI in satellites, launch vehicles, spaceports, and manufacturing space-related components and systems.
- According to it, **100% percent FDI has been allowed** for the space sector category of manufacturing and operation of satellites, satellite data products, and ground segment and user segment.
- Out of this, up to **74% would be through the automatic route** and government nod would be required for investment beyond that.
 - ♦ Under the earlier policy, any foreign investment in manufacturing and operating satellites was allowed only with government approval.

Foreign direct investment (FDI)

- It is a category of **cross-border investment**.
- It requires a substantial investment in, or the outright acquisition of, a company based in another country.
- **Ownership of 10%** or more of the voting power in an enterprise in one economy by an investor in another economy is evidence of such a relationship.

Importance:

- It is a **key element in international economic integration** because it creates stable and long-lasting links between economies.
- It is an important channel for the **transfer of technology between countries, promotes international trade** through access to foreign markets, and can be an **important vehicle for economic development**.

Significances of FDI in Space Sectors

- **Private Sector Participation:** The Indian space structure is moving from building India's capabilities under ISRO to further **capitalization of space-based technology for commercial applications** as well as industry involvement in the sector.
 - ♦ It is expected to integrate Indian companies into global value chains.
- **Space Missions:** India has achieved many considerable feats in space missions and has established its name in the global picture as a provider of **reliable and cost-effective space solutions**.
- **Technology Absorption and Global Integration:** It will enable modern technology absorption.
 - ♦ With increased investment, companies could achieve sophistication of products, global scale of operations, and enhanced share of the global space economy.
 - ♦ It is expected to integrate Indian companies into global value chains.
- **Boost Manufacturing:** Companies will be able to **set up their manufacturing facilities within the country**, encouraging the Government's **'Make In India'** initiative.
- **Ease of Doing Business:** The FDI policy reform will enhance **Ease of Doing Business** in the country, leading to greater FDI inflows and thereby contributing to the growth of investment, income, and employment.

- **Promote Research and Innovations:** FDI in space will promote technology transfer and research innovations.

Concerns and Challenges

- **Limited Investor Interest:** There is limited investor interest at later stages of development.
 - ♦ This could be due to the high-risk nature of space investments and the long-term return on investment.
- **Talent Pool:** The talent pool for space tech startups needs to grow.
 - ♦ There is a need for more skilled professionals in the field of space technology.
- **Policy Clarity:** There is a need for more policy clarity.
 - ♦ Clear and consistent policies can help attract more foreign investors.
- **Simplifying the FDI Process:** The process for foreign direct investment needs to be simplified.
 - ♦ A complex process can deter potential investors.
- **Capital-Intensive Requirements:** Space technology is capital-intensive.
 - ♦ This means that it requires a significant amount of capital investment, which can be a challenge for startups and smaller companies.
- **Conflict of Interest with ISRO:** Foreign investors have been on the fence about investing in the Government monopolised Indian space sector.
 - ♦ The conflict of interest with ISRO as a competitor had perpetuated apprehension in the minds of foreign investors.

Conclusion

- The liberalisation of the FDI policy in the space sector is a strategic move by the Indian government to lower entry barriers for foreign players seeking to collaborate with or invest in Indian space enterprises.
- This move is set to revolutionise the Indian space industry by opening new avenues for foreign investment and participation, thereby accelerating India's journey towards becoming a global space powerhouse.

Source: IE

'VOLUNTARY CODE OF ETHICS' FOR SOCIAL MEDIA PLATFORMS

Context

- Recently, a social media platform agreed to takedown posts and to follow the 'Voluntary Code of Ethics'.

About the Voluntary Code of Ethics

- It is a significant initiative by the **Election Commission of India (ECI)** and the **Internet and Mobile Association of India (IAMAI)** to ensure free, fair, and ethical use of social media platforms during elections.
- It has been developed **to ensure free, fair, and ethical usage of social media platforms to maintain the integrity of the electoral process.**
- The code voluntarily agreed upon by the participants comes into operation with immediate effect.

Emergence of the Code

- The code was **developed in 2019**, in response to the increasing use of social media by political parties.
- It includes provisions such as voluntarily undertaking information, education, and communication campaigns to build awareness about electoral laws.

Key Provisions of the Code

- Social media platforms need to deploy appropriate policies and processes to facilitate access to information on electoral matters.
- These platforms need to commit to facilitating transparency in paid political advertisements, including utilising their pre-existing labels or disclosure technology for such advertisements.
- Platforms will, upon notification from the ECI, process any violations reported under **Section 126 of the RP Act, 1951**, within three hours as per the **Sinha Committee recommendations.**

Impact and Implementation

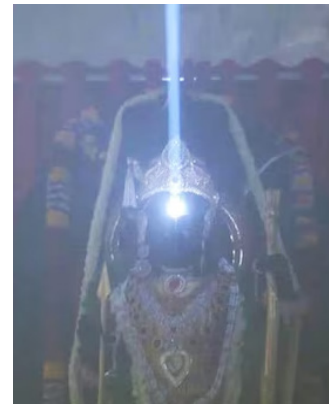
- The ECI, in pursuance of the 'Voluntary Code of Ethics', has been directing several social media platforms to take down content (links, videos, posts, tweets) found objectionable as per various provisions of the **Model Code of Conduct, Representation of People's Act, the Indian Penal Code**, and other electoral laws during elections.

Source: IE

SCIENCE BEHIND SURYA TILAK CEREMONY

Context

- Recently, the forehead of Lord Ram's idol in Ayodhya's newly-built temple was lit up by a beam of sunlight.



About the Concept of Surya Tilak

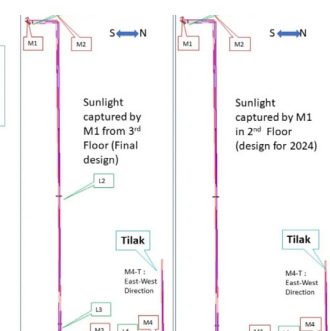
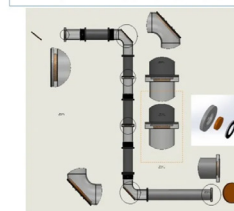
- The term Surya Tilak is derived from Surya (Sun) and Tilak (a mark worn on the forehead).
- It involves a complex **interplay of mirrors, lenses, and a specialised gearbox** to precisely align the sun's rays and direct them onto the forehead of the Ram Lalla idol.
- The significance lies in Lord Ram's lineage tracing back to the **Ishvaku clan**, believed to be descendants of the sun, or Suryavanshis.

The Mechanism:

- The Surya Tilak mechanism involves a complex system designed and implemented by the **Central Building Research Institute (CBRI) in Roorkee**, in collaboration with the **Indian Institute of Astrophysics (IIA)** and a **Bangalore-based company, Optica.**
- This intricate setup, comprising brass and bronze components for durability, directs the sun's rays into the **Sanctum Sanctorum at the appointed time.**

HOW THE SYSTEM WORKS

Concept: Periscope with Mirrors & Lenses
 Number of mirrors: 4 (M1, M2, M3 and M4: Flat)
 No tracking for Sun in East-West direction
 Number lenses used : 4 (L1, L2, L3, L4)
 M1 shifts position every year (19 year cycle)



- The mechanism consists of **four mirrors and four lenses** fitted inside a **tilt mechanism**.
 - ♦ The **first mirror**, responsible for receiving the sunlight, is positioned at an angle along the path of the sun rays.
 - ♦ The light is then **reflected to three other mirrors** and passes through four lenses until it is of the desired intensity, and is **directed to the idol's forehead**.
 - ♦ The mirrors direct the beams while the lenses make them converge to the required intensity.

Significance

- The Surya Tilak ceremony is a testament to the **fusion of ancient tradition with modern science**.
- The practice of Surya Tilak using integration of optics and mechanics is not new and has been essential to the ancient temples of the Indian subcontinent.
- Various temples across India perform this ceremony, each having a distinct engineering technique that illuminates deities with sunlight at specific times.
 - ♦ For instance, the **Suriyanar Kovil Temple in Tamil Nadu**, built between the 11th-12th centuries, illuminates specific areas throughout the year, including the deity Suriyanar and his consorts.

Source: IE

NEWS IN SHORT

ROGUE WAVE

Context

- An expedition to the southernmost waters encircling Antarctica has discovered that wind drives the formation of colossal rogue waves.

About

- Rogues, also known as 'extreme storm waves', are those waves which are greater than twice the size of surrounding waves, are very unpredictable, and often come unexpectedly from directions other than prevailing wind and waves.
- Rogue waves emerge from strong wind forces and unpredictable waveform patterns. They are often **steep-sided** with unusually **deep troughs**.

Source: Phys.org

SUBMERSIBLE PLATFORM FOR ACOUSTIC CHARACTERISATION AND EVALUATION (SPACE)

Context

- A state-of-the-art Submersible Platform for Acoustic Characterisation and Evaluation (SPACE) was inaugurated at Underwater Acoustic Research Facility, in Kerala.

About

- **The SPACE** is set up by the Naval Physical & Oceanographic Laboratory of DRDO.
- **Objective:** It has been designed as a premier testing and evaluation hub for sonar systems destined for the Indian Navy onboard various platforms including ships, submarines and helicopters.
- The SPACE will consist of two distinct assemblages;
 - ♦ A platform which floats on the water surface and
 - ♦ A submersible platform which can be lowered to any depth up to 100 m using winch systems.

Applications

- The SPACE will be utilized for evaluation of complete sonar systems, allowing for quick deployment and easy recovery of scientific packages such as sensors and transducers.
- It will be suitable for survey, sampling, and data collection of air, surface, mid-water, and reservoir floor parameters using modern scientific instrumentation.

Source: PIB

NASA'S PERSEVERANCE ROVER

Context

- **NASA's Mars sample return program** has been deemed **too expensive while also taking too much time**.

About

- NASA's Perseverance Rover, **nicknamed Percy**, in 2023 created the first sample depot on another world.
- The rover is designed to **explore the Martian surface** looking for signs of past and present life on the planet to contribute to **NASA's Mars Exploration Programme's science goals**.

- ♦ The rover will perform numerous scientific experiments, including **searching for signs of life on Mars**, during its mission that is intended to **last at least two years**.
- As per NASA, the sample return program from Mars is **too expensive and will only be executed by the year 2040**.

Source: IE

GREEN CREDIT PROGRAMME (GCP)

Context

- Recently, the Union Environment Ministry has made significant changes to the Norms of the Green Credit Programme.

About the Green Credit Programme (GCP)

- It is an innovative initiative launched by the **Ministry of Environment, Forest and Climate Change (MoEF&CC)** that was announced under the government's **'Lifestyle for Environment' or 'LiFE'** movement.
- It aims to create a market-based mechanism for incentivising **'voluntary environmental actions'** by individuals, urban local bodies, communities and the private sector.
- It is designed **to incentivise voluntary environmental actions** across diverse sectors, by various stakeholders like individuals, communities, private sector industries, and companies.
- In its initial phase, the GCP focuses on **two key activities: water conservation and afforestation**.

Implementation of the Programme

- The **GCP's governance framework** is supported by an inter-ministerial Steering Committee and the Indian Council of Forestry Research and Education (ICFRE) serves as the GCP Administrator, responsible for **programme implementation, management, monitoring, and operation**.
- A user-friendly digital platform will streamline the processes for registration of projects, its verification, and issuance of Green Credits.
- The **Green Credit Registry and trading platform**, being developed by ICFRE along with experts, would facilitate the registration and thereafter, the buying and selling of Green Credits.
 - ♦ To obtain Green Credits, individuals and entities must register their activities to the government.

- ♦ The Administrator will verify the activity through a designated agency, with self-verification for small projects.

Impact of the Programme

- GCP aims to incentivise environmental positive actions through a market-based mechanism and generate green credit, which shall be tradable and made available for trading on a domestic market platform.
- It adds that if generating green credits led to measurably reducing or removing carbon emissions, it could also be used to get carbon credits.

Changes to the Programme

- Amid concerns that the GCP may encourage tree planting for financial gains, the government has clarified that **primacy must be accorded to restoring ecosystems** over merely tree planting.
 - ♦ Preference would be given to indigenous species and naturally growing seedlings would be retained.
- The Ministry has changed the earlier requirement that there be a minimum of 1,100 trees per hectare to qualify as a reforested landscape and **left it to States to specify them**.
 - ♦ The actual afforestation will be carried out by State forest departments.

Source: TH

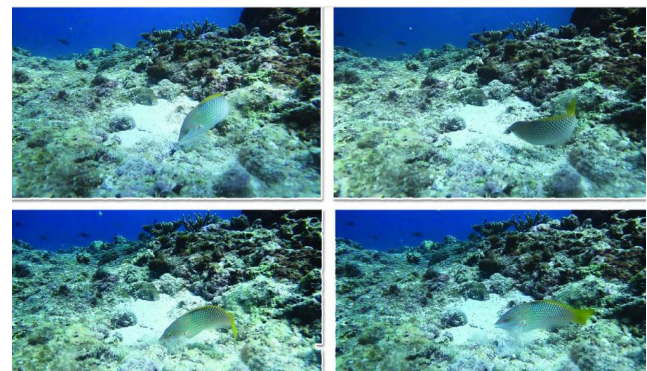
FISH SPECIES SPOTTED USING TOOLS

Context

- Three new fish species have been **spotted using tools in the Laccadive Sea**.

About

- The Jansen's wrasse (*Thalassoma janseni*) and the checkerboard wrasse (*Halichoeres hortulanus*) have never been reported using tools before, and this is the first documented instance of the moon wrasse (*Thalassoma lunare*) using tools in the wild.



- All three species used **live or dead coral structures** as anvils **to break the hard shells of sea urchins so they could get to the edible bits inside.**
 - Reports of animals like chimpanzees using straws to draw water and crows fashioning leaves to extract insects from crevices are well known whereas reports of aquatic animals **using tools have been far less common.**
 - ◆ This is partly because they are **much more difficult to observe** and because of the perception that **species like fish are 'less intelligent'.**
 - **The Laccadive Sea or Lakshadweep Sea** is a body of water bordering India, the Maldives, and Sri Lanka.
 - ◆ It is located to the southwest of Karnataka, to the west of Kerala and to the south of Tamil Nadu.
 - ◆ The warm sea has a stable water temperature through the year and is rich in marine life.
- Source: TH

