# CURRENT AFFAIRS WEEKLY

**WEEK: 2 JANUARY 2024**

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- NORTH INDIA IS GRAPPLED WITH DENSE FOG, HALTS OF NORMAL LIFE
- DISCOVERY OF PALEOLITHIC QUARTZITE TOOLS
- CHILD MARRIAGES IN INDIA: A PERSISTING PROBLEM

### GS- II
- GRIEVANCE REDRESSAL COMMITTEES (GRCS) UNDER STREET VENDORS ACT
- BILKISBANO CASE: STRIKING A BALANCE BETWEEN RULE OF LAW AND RIGHT TO LIBERTY
- ALIGARH MUSLIM UNIVERSITY (AMU'S) MINORITY CHARACTER: A CONSTITUTIONAL CONUNDRUM AND THE SIGNIFICANCE OF MINORITY INSTITUTIONS IN INDIA
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# — Disclaimer —

The current affairs articles are segregated from prelims and mains perspective, such separation is maintained in terms of structure of articles. Mains articles have more focus on analysis and prelims articles have more focus on facts.

However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.

# CURRENT AFFAIRS WEEKLY

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## IIT DELHI TEAM MAKES FIRST HI–RES LANDSLIDE RISK MAP FOR INDIA

**Context:** The map data is available for free; the researchers have also created an online portal for people to explore the map.

### Background:

◈ In late 2023, **devastating floods and landslides** wreaked havoc in multiple states in North India, **claiming hundreds of lives**.

◈ The **absence of a national landslide susceptibility map** prompted ManabendraSaharia, an assistant professor at IIT Delhi, to lead an initiative to develop one using the latest techniques.

### Uniqueness of Landslide Challenges in India

◈ **Data Challenges:** Unlike floods, **landslides in India are more localized** and affect only about 1-2% of the country. Tracking and studying them is difficult due to the scarcity of high-quality data.

### The Research Approach

◈ **Data Collection:** Graduate students**collected data on nearly 1.5 lakh landslide events** from sources including the **Geological Survey of India (GSI)** and **other global databases**.

◈ **Factors Considered:**Sixteen landslide conditioning factors** were identified, including soil cover, tree density, and proximity to roads or mountains.

### Technology and Machine Learning

◈ **Utilizing Latest Techniques:** The research aimed to not only use available data but also incorporate **state-of-the-art techniques.**

◈ **Ensemble Machine Learning:** Using ensemble machine learning methods, the researchers **analyzed 150,000 data points for known landslide events** and the 16 identified factors.

### Developing the National Landslide Susceptibility Map

◈ **Resolution and Coverage:** The resulting high-resolution map, named the **'Indian Landslide Susceptibility Map,'** covered the entire country with a resolution of 100 m, estimating susceptibility for each 100 sq. m parcel.

### Identifying High-Risk Areas

◈ **Known and Unknown Susceptibility:** The map confirmed known high-risk regions like the Himalayan foothills but also revealed previously unknown vulnerable areas, such as parts of the Eastern Ghats.

◈ **Policy Implications:** The map is expected to assist policymakers in assessing vulnerability and formulating effective mitigation measures.

### Future Initiatives

◈ **Early Warning System:** Building on the map, the researchers aim to develop a **'Landslide Early Warning System' for India.**

◈ **Infrastructure Vulnerability Map:** In addition to the landslide map, efforts are underway to create an **infrastructure vulnerability map depicting areas susceptible to landslides**.

### Public Accessibility

◈ **Online Availability:** The map is **available online for public access**, providing a **user-friendly interface** for exploring regions of interest.

◈ **Community Engagement:** Encouraging people to utilize the data, the researchers emphasize the **map's accessibility without requiring technical knowledge**.

### Way Forward:

◈ The creation of **India's first national landslide susceptibility map** represents a significant leap in understanding and addressing the unique challenges posed by landslides.
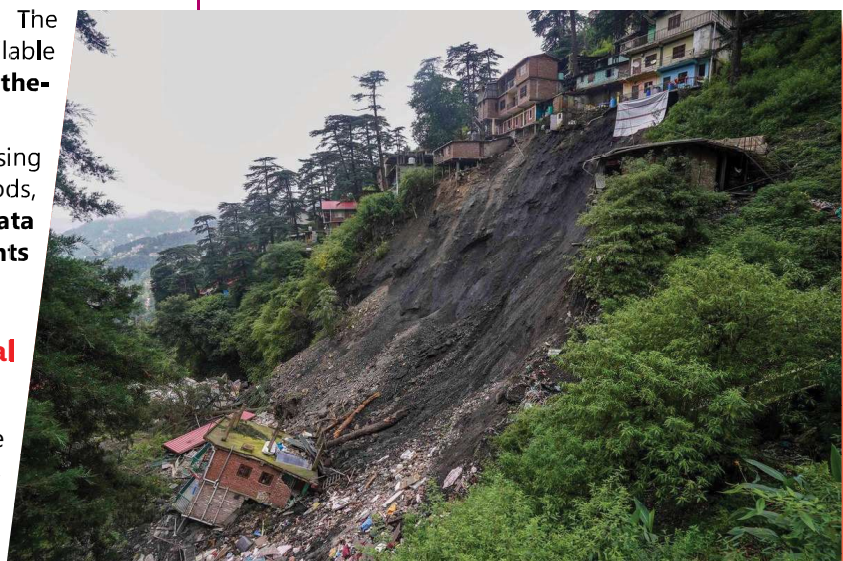
❖ With **applications ranging from early warning systems to infrastructure planning**, the map is poised to play a crucial role in mitigating the impact of landslides across the country.

## NORTH INDIA IS GRAPPLED WITH DENSE FOG, HALTS OF NORMAL LIFE

**Context:** According to Indian Metrological department, minimum temperatures in Punjab, Haryana, and the northern reaches of Rajasthan and Uttar Pradesh hovered around 6-9°C

❖ **Dense fog:** It is generally a thick white cloud that forms close to the land or sea. Temperatures should be lower and abundant moisture should be available near the surface."

❖ **Mechanism:** The land surface cooling down at nigh which also led the air close to the surface also cools down. As cooler air cannot hold as much moisture as warm air(supersaturation), the water vapour in the air condenses and form fog.

### How Fog Is Formed:
Warm air rises.
Cold air sinks.
cold
sofatutor.com
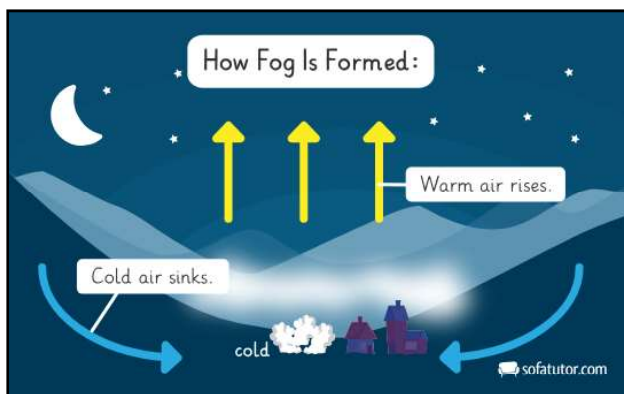
### Condition for fog formations:

❖ Low temperature

❖ Abundant moisture near the surface

❖ High humidity(some instance where at lower humidity it may result in fog)

**North India a rich ground of Fog Formation in winter, Why?**

Main area include the Indo-Gangetic plains due to

• low temperatures

• low wind speed

• moisture availability(Due to western Disturbances which brings Precipitation North India in winter )

• Indian ocean region(Arabian sea brings the moisture)

## DISCOVERY OF PALEOLITHIC QUARTZITE TOOLS

**Context:** The recent floods in the Mulugu district of Telangana has led to a fresh discovery of paleolithic quartzite tools.

### What were the findings?

❖ The tools or hand axes were found in the sand bed of a stream that dried up after the flood. The stone axe measuring 15.5cm in length, 11cm in width and 5.5cm in thickness.

❖ The hand axes were found in the stream between Gurrevula and Bhupatipuram villages in Mulugu district. The tools got exposed as the stream has dried up.

❖ The new discovery pushes back the understanding about human habitations in Telangana and central India.

### Dating of the tools and Palaeolithic Period

❖ The stone axe belongs to the Lower Paleolithic period and is about 30 lakh years ago. Paleolithic Age is also known as or Old Stone Age or Early Stone Age. It dates back to about 33 lakh years BC. It lasted for 10,000 years.

❖ Palaeolithic hunter gatherers used heavy quartzite and large tools. Similar hand axes as these have been discovered worldwide. The tools were used for cutting wood and killing animals for food.

❖ In 1863, the East India Company's Geological Survey team found a paleolithic site at Attirampakkam near Madras (present-day Chennai) with bifacial hand-axes made of stone by early humans.

❖ The tools were about 15 lakh years old. Paleolithic culture has been labelled as Madras Hand-Axe Industry or Madrasian Culture.

### Palaeolithic Period

❖ Also known as Old Stone Age. It has been divided into 3 parts: Lower palaeolithic, Middle and Upper Palaeolithic Age.

❖ In this period early humans were roaming and they lived a life of hunter and gatherers. It is called Stone Age due to chief tool which was used by human were made of stone.

### Sites in India

Bori in Maharashtra is considered the oldest one- dating 20 lakh years.

◈ **Bhimbetka Caves:** Located in Madhya Pradesh, Bhimbetka is home to some of the earliest rock paintings, providing valuable insights into the life of Paleolithic humans.

◈ **Homo Erectus:** Fossil evidence suggests the presence of Homo erectus in the Indian subcontinent. The Narmada Valley and the Soan Valley are significant sites associated with these early humans.

◈ **Tool Varieties:** The tools used by Paleolithic humans were largely made of stone, but the sophistication increased over time. Handaxes, cleavers, scrapers, and blades were essential for their survival.

◈ **Hunting and Gathering:** Paleolithic communities were predominantly engaged in hunting animals and gathering plant resources for sustenance.

◈ The Paleolithic period laid the foundation for human evolution and adaptation, setting the stage for the subsequent cultural and technological developments in the Indian subcontinent.

## CHILD MARRIAGES IN INDIA: A PERSISTING PROBLEM

**Context:** In the states like Maharashtra and West Bengal the child marriage again saw an uptick in past 5 years.

### Case of Maharashtra

◈ Data from the Ministry of Women and Child Development show that across Maharashtra, there were 13 reported instances of child marriage in 2018; 20 in 2019; 50 in 2020 and 82 in 2021.

◈ However, statistics compiled by an NGO, the Committee of Resource Organisation, show that 10 instances of child marriage took place in 2018; 30 in 2019; 45 in 2020 and 71 in 2022, in the districts of Beed and Latur alone.

◈ However according to the social workers, the unreported cases far outweigh reported ones.

### Pertinent identified Reasons

◈ The farmers working in the sugarcane fields in lathur and beed districts, due to their socio-economic conditions marry off the girls at an early age.

◈ The families take their girl child to work in sugarcane fields, however this is just a temporary as they are married off at an early age due to the fear of sexual violation of girls.

◈ They prefer to marry them due to prevailing social challenges, poverty which force their choices to be limited.

◈ However the Child marriage is a social ill which has roots so engrained that another 25 years might take to eradicate it. Though for this to happen we need to tackle the issue of poverty, illiteracy and make social changes more inclusive so that it penetrates deep down at all levels and classes of society.

### All India analysis of issues related with Child Marriage

◈ Child marriage persists in India due to a confluence of factors, deeply rooted in societal norms and economic challenges.

### Causes:

◈ **Poverty and Social Norms:** Economic hardship, coupled with ingrained social norms, perpetuates child marriage, especially in regions like West Bengal.

◈ **Migration and Security Concerns:** Families, in fear for their daughters' safety, resort to early marriages before migrating for work, particularly noted in West Bengal.

◈ **Policy Implementation Gaps:** Despite prevalent child marriages, there is a substantial gap in enforcing laws like the Prohibition of Child Marriage Act, as seen with only 105 cases registered in West Bengal in 2021.

### Impact on Health:

◈ **Health Risks:**
  ➤ Child marriage contributes to higher infant mortality rates, as illustrated by the distressing incident at Murshidabad Medical College.



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➤ Infants born to child brides often face extremely low birth weight, a pervasive health issue.

➤ Young mothers experience heightened risks during pregnancy and childbirth, imposing a burden on both maternal and infant health.

➤ Persistently high rates of child marriage, such as 41.6% in West Bengal, indicate a broad health crisis affecting multiple generations.

◈ **Education Disruption:** Early marriages curtail a girl's education, limiting her future prospects and economic independence.

### Human Rights Implications:

Child marriage poses a severe threat to human rights, particularly concerning:

◈ **Right to Education:** The premature end to a girl's education violates her right to education, impeding personal and socio-economic development.

◈ **Right to Health:** The health risks associated with early pregnancies infringe upon the right to health, compromising both maternal and child well-being.

### Initiatives Undertaken:

◈ **KanyashreePrakalpa:** West Bengal's cash transfer scheme incentivizes girls' education, discouraging child marriage and benefiting around 81 lakh girls.

◈ **RupashreePrakalpa:** A cash incentive scheme for girls' marriages, aimed at delaying the age of marriage.

◈ **Legal Age Amendment:** The introduction of the Prohibition of Child Marriage (Amendment) Bill, 2021, seeks to raise the legal marriage age for women to 21.

◈ **District Action Plans:** In 2022, West Bengal initiated district-specific plans to combat child marriage, emphasizing localized solutions.

### The Way Forward:

Addressing child marriage necessitates a multifaceted approach:

◈ **Social Campaigns:** Engage in robust awareness campaigns to alter societal attitudes towards child marriage.

◈ **Community Involvement:** Encourage community participation to challenge norms and promote education.

◈ **Stricter Law Enforcement:** Ensure rigorous enforcement of existing laws, like KanyashreePrakalpa, through political will and public pressure.

◈ **Comprehensive Policies:** Develop comprehensive policies that encompass education, healthcare, and socio-economic empowerment to address the root causes of child marriage.

◈ In tackling child marriage, a holistic strategy combining legal, social, and economic aspects is imperative, underlining the need for sustained efforts to protect human rights and foster societal progress. This issue demands continuous attention and innovative solutions at both the policy and grassroots levels.

## GRIEVANCE REDRESSAL COMMITTEES (GRCS) UNDER STREET VENDORS ACT

*Context:* **The non-implementation of grievance redressal envisaged under street vendor act.**

### About the Issue-

◈ Despite a decade since the inception of the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014, a crucial provision—the establishment of Grievance Redressal Committees (GRCs) in all urban local bodies—remains largely unimplemented. This raises concerns about the effectiveness of safeguarding street vendors' rights and addressing grievances.

◈ The Act mandates state governments to form GRCs, consisting of a retired civil judge or judicial magistrate as the chairperson and two professionals. These committees serve as a recourse for street vendors facing issues like harassment by police and local authorities.



### Who are the street vendors?

◈ Street Vendor is a person who offers goods for sale to the public at large without having a permanent built-up structure from which to sell.

◈ Street vendors may be stationary in the sense that they occupy space on the pavements or other public/

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priv.ate spaces or, they may be mobile in the sense that move from place to place by carrying their wares on push carts or in baskets on their heads.

## Emergence of Street Vendors:

❖ Primarily, the surge in street vendors can be attributed to the dearth of employment opportunities and prevalent poverty in rural areas, prompting individuals to migrate to urban centers for better prospects.

❖ Many of these migrants lack the necessary skills and education for formal employment, compelling them to engage in the informal sector.

❖ Additionally, individuals who formerly held jobs in the formal sector find themselves joining the informal sector due to industry closures, downsizing, or mergers, as they struggle to secure livelihoods.

### Challenges Encountered by Street Vendors

#### Space Constraints:

● The urban planning in our cities, influenced by Western marketing concepts, often neglects to designate spaces for vendors and hawkers, disregarding indigenous practices.

#### Navigating Multiple Authorities:

● Street vendors contend with various authorities such as municipal corporations, police (both regular and traffic divisions), regional development bodies, district administrations, and local panchayats. This multiplicity leads to exploitation and extortion.

● Positive initiatives by one authority are sometimes nullified by conflicting actions from others.

#### Frequent Evictions:

● Regular eviction drives conducted by district or municipal administrations create an atmosphere of fear among vendors. The eviction teams, known by different local names, are viewed with apprehension.

#### Extortion Challenges:

● The informal sector faces the burden of 'rangdari tax' and 'hafta' in various cities. Vendors often have to part with significant amounts of money to continue their trade.

## Current Scenario:

❖ While GRCs have been established in only 17 states, their presence is not universal within those states, creating gaps in the grievance redressal mechanism.

❖ During a national seminar, Hardeep Singh Puri, Minister of Housing and Urban Affairs, emphasized the need for wider GRC implementation, citing their potential to foster inclusivity and support.

### Importance of GRCs

● GRCs play a pivotal role in providing street vendors with a formal channel to address grievances, ensuring protection from harassment, and fostering a supportive environment for their livelihoods.The Act envisions GRCs as a key element in the regulatory framework for street vending.

## The Way Forward:

❖ To bolster the livelihoods of street vendors, it is imperative to streamline the implementation of GRCs across all states.

❖ The Act envisions vibrant town vending zones, demarcated vending zones, and issued certificates of vending as mechanisms to formalize and protect street vending activities.

❖ As India seeks to enhance the lives of street vendors, the effective implementation of GRCs becomes paramount.

❖ By addressing existing challenges and providing comprehensive guidelines, the government can ensure that the Street Vendors Protection Act fulfills its intended purpose of safeguarding the livelihoods of this important section of society.

## The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014

❖ Is a legislative framework aimed at safeguarding the rights and regulating the activities of street vendors in India

❖ Enacted to address the socio-economic concerns of this informal sector, the key provisions of the Act include:

## Grievance Redressal Committees (GRCs):

❖ Mandates the formation of GRCs in urban local bodies to address grievances faced by street vendors.

❖ Comprises a chairperson, typically a retired civil judge or judicial magistrate, and two other professionals.

## Grievance Redressal Mechanism:

❖ Provides street vendors with a formal mechanism to report and seek redressal for issues, including harassment by police and local authorities.

## Regulation of Street Vending:

❖ Aims to strike a balance between the rights of street vendors and the regulation of their activities in public spaces.

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### Empowerment of Urban Local Bodies:

❖ Empowers urban local bodies to demarcate vending zones, issue certificates of vending, and regulate street vending activities.

❖ Envisions GRCs as instruments to foster a more inclusive and supportive environment for street vendors.

## BILKISBANO CASE: STRIKING A BALANCE BETWEEN RULE OF LAW AND RIGHT TO LIBERTY

**Context:** The Supreme Court's recent judgment in the BilkisBano case delves into the intricate balance between the rule of law and the right to personal liberty, emphasizing the judiciary's pivotal role in upholding democratic principles.

### Background:

❖ The case involved the quashing of the Gujarat government's decision to **grant remission** to convicts in the BilkisBano case.

❖ While acknowledging **personal liberty as a fundamental right under Article 21, the Court scrutinized whether the rule of law could override it.**



### Case Profile:

❖ BilkisBano, the survivor of a horrific incident, sought justice as the convicts in her case were released based on **orders deemed "illegal" and "wholly without jurisdiction**."

❖ The court's decision aimed to restore the balance **between justice and the adherence to legal procedures**.

### Rule of Law and its Significance:

❖ **Defining the Rule of Law**: Coined by **John Adams** as "a government of laws and not of men," the rule of law acts as **a safeguard against executive lawlessness**. It ensures that no individual can be detained without legislative sanction.

❖ **Judiciary as Guardian:** The Supreme Court emphasized its role as the guardian of the rule of law, asserting that it is the cornerstone of a democratic state. The court's intervention becomes necessary when the state fails to fulfill its duties.

### Right to Liberty:

❖ **Constitutional Foundation**: Article 21 of the Constitution guarantees the **right to personal liberty**. However, the court scrutinized whether this right could be compromised in the interest of upholding the rule of law.

❖ **Equality Before Law**: The court highlighted **that breaching the rule of law negates the principle of equality as prescribed by Article 14**. It asserted that no one, regardless of status, is above the law.

### Judiciary's Role:

❖ **Beacon of Rule of Law:** The court emphasized its role as a beacon in **upholding the rule of law, stating that a selective application of this concept could lead to a dangerous state of affairs in democracy**.

❖ **Compassion vs. Rule of Law**: The court asserted that **compassion and sympathy have no role where the rule of law is concerned**. Upholding the essence of democracy requires preserving and enforcing the rule of law without bias.

### Decision and Rationale:

❖ **Restoration of Status Quo**: Rejecting the convicts' plea for protection of liberty, the court held that the rule of law must prevail**, setting aside the orders of remission as null and void.**

❖ **Principle of Equal Protection:** The court justified the deprivation of liberty for the convicts, citing the **principle of equal protection of law under Article 14. It emphasized restoring the status quo ante to maintain justice.**

❖ The BilkisBano case serves as a significant judicial pronouncement **reaffirming the delicate equilibrium between the rule of law and the right to liberty**. The judgment underscores the judiciary's pivotal role in preserving democratic values while ensuring justice prevails, even in the face of legal complexities.

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## ALIGARH MUSLIM UNIVERSITY (AMU'S) MINORITY CHARACTER: A CONSTITUTIONAL CONUNDRUM AND THE SIGNIFICANCE OF MINORITY INSTITUTIONS IN INDIA

**Context:** Supreme Court is hearing the case related with issue of AMU status as minority institution dating back 57 years.

◈ The legal dispute over Aligarh Muslim University's (AMU) minority character, dating back 57 years, stems from the interpretation of Article 30(1) of the Constitution, which empowers religious and linguistic minorities to establish and administer educational institutions. This dispute has seen multiple court interventions, shaping the trajectory of AMU's status as a minority institution.



◈ **Historical Background:** AMU's origins trace back to the Muhammadan Anglo-Oriental (MOA) College, established in 1875 by Sir Syed Ahmad Khan. It aimed to address educational backwardness among Muslims, evolving into a university in 1920 under the AMU Act. The Act acknowledged its role as a "teaching and residential Muslim University."

◈ **Genesis of Dispute:** The legal challenge emerged in 1967, questioning amendments to the AMU Act made in 1951 and 1965. Changes altered the University's structure, provoking a Supreme Court ruling that, in 1967, declared AMU was not established or administered by the Muslim minority. The court emphasized that while Muslims may have initiated the university, its recognition by the Indian government necessitated a central Act.

◈ **Persistent Dispute:** Post the 1967 ruling, nationwide protests ensued, prompting a 1981 amendment affirming AMU's minority status. This led to Section 2(l) explicitly stating it was "an educational institution of their choice established by the Muslims of India." However, legal challenges persisted, with the Allahabad High Court overturning a reservation policy in 2005, citing the 1967 verdict. The Union government, along with other petitioners, contested this decision in the Supreme Court in 2006.

### The Importance of Minority Institutions:

◈ **Preserving Diversity:** Minority institutions play a pivotal role in preserving cultural and religious diversity by providing a platform for communities to impart education aligned with their ethos.

◈ **Inclusive Education:** These institutions contribute to inclusive education, offering students from minority communities an environment that respects and values their cultural identity.

◈ Empowerment:Recognizing minority institutions empowers communities to actively participate in the educational landscape, fostering a sense of ownership and agency.

◈ **Constitutional Intent:** While Article 30(1) emphasizes minority rights, the AMU case raises questions about the balance between autonomy and state recognition, as the 1967 verdict highlighted the central Act's role.

◈ **Policy Implications:** The legal tussle has implications for reservation policies and the autonomy of minority institutions, with potential ramifications on inclusive education.

◈ **Educational Autonomy:** The dispute has implications for the autonomy of educational institutions and the extent to which the government can regulate their character.

◈ **Minority Rights:** It raises broader questions about minority rights and the interpretation of these rights in the context of educational institutions.

### Recent Developments

◈ In 2019, the Supreme Court referred the matter to a seven-judge Bench, acknowledging the complexity of the issue.

◈ The ongoing hearings explore the nuanced interplay between minority rights, constitutional provisions, and the institutional autonomy of AMU.

◈ The AMU dispute encapsulates the delicate balance between minority rights, constitutional provisions, and the need for state recognition. Recognizing the importance of minority institutions is crucial for fostering a diverse and inclusive educational landscape in India.

◈ The ongoing legal deliberations will shape not only AMU's future but also influence the broader discourse on minority rights and educational autonomy.

## 30 NGOS GOT FCRA CLEARANCE

**Context:** After 1,111 NGOs got FCRA nod in 2023, 30 get clearance in January. Registration under FCRA is mandatory to receive foreign donations. The NGO must have a definite cultural, economic, educational, religious or social Programme to get registered.

NGO works in the field of providing human rights, voters' rights, and healthcare to needy. They cover the multiple areas which also includes the preventing cruelty to animals. NGOs can be funded by donations and grants.

### Registration mechanism:

❖ These organisations are not a part of the government. They are registered under the specific Act (Societies Registration Act, 1860 in India) of the government.

❖ They may include Registered Societies formed for specific purposes, Charitable Organizations and Trusts, Local Stakeholders Groups, Microcredit and Thrift Enterprises, Self Help Groups, Professional Self-Regulatory Bodies, Cooperatives, Bodies without having any formal organizational structureGovernment promoted Third Sector Organizations.

### Regulatory Oversight of NGOs:

### Foreign Contribution (Regulation) Act (FCRA), 2010

❖ Foreign funding of voluntary organizations is implemented by Ministry of Home Affairs through FCRA act.

❖ The acts mandate the organisation those are recipients of foreign contributions should adhere to the stated purpose for which such contribution has been obtained.

❖ Act requires organisations to register themselves every five years.

### Foreign Exchange Management Act, 1999

❖ It is an Act of the Parliament of India whose objectives includes consolidate and amend the law relating to foreign exchange with the objective of facilitating external trade and payments and for promoting the orderly development and maintenance of foreign exchange market in India . **A transaction under FEMA is called a fee or a salary while the same under FCRA is called a grant or a contribution.**

❖ In 2016, the powers of Ministry of Finance to monitor NGOs were placed under the FEMA. Philosophy behind these changes ensures better monitoring and regulations.

### Key Achievements of NGOs

❖ Strengthen the child rights(CRY (Child Rights and You))

❖ Bringing social entrepreneurship and women Empowerment (Goonj)

❖ reducing poverty and social injustice. (Care India)

❖ Increasing the Social audit Mechanism (Parham Report)

### Issues with NGOs

❖ Conflict with centuries old Traditions (Ban of Jallikattu, after the PIL by PETA )

❖ Lack of self-Originating funds, dilutes the willingness of NGOs to speak out against the government.

❖ Accreditation related Problem (Non state actor, bad intention )

❖ NGOs have acted as a cover for organized crime in past and are often seen as fronts for fundamentalist causes.

❖ Foreign funded NGOs have been responsible for organising agitations and scuttling development projects in India.

### Way forward:

❖ A Single National Authority Council consisting of academicians, activist, retired bureaucrats should be made to ensure compliance by NGOs.

❖ Agile coordination between Ministries of Home Affairs and Finance in terms of monitoring and regulating illicit and unaccounted funds.

❖ A Transparent regulatory mechanism to keep a watch on the financial activities of NGOs and voluntary organizations.

❖ Citizens Led promotion to promote social justice, gender equity, inclusion etc.

## SC FINDS MULTIPLE LOOPHOLES IN MEASURES TAKEN FOR DISABILITY SECTOR

**Context:** SC report exposes severe gaps in accessibility for people with disabilities at courts across India.

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## Current state of Disability in India

◈ As per Census 2011, in India, around 2.68 Cr persons are 'disabled' ( 2.21% of the total population)

◈ The Constitution of India ensures equality, freedom, justice and dignity of all individuals which ensures inclusive society for all, including persons with disabilities. Even after many initiative of Indian government, effects are very limited to ensure rights to disabled person.

## Existing measures taken by Government:

**Rights of persons with disabilities act 2016 :**

◈ The act, increased number of include disabilities from 7 to 21

◈ Includes provision for reservation in higher education and government jobs, free education for children between 6 to 18 years.

◈ The National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999:

◈ To enable and empower persons with disability to live as independently and as fully as possible within and as close to the community to which they belong.

◈ **Mental Healthcare Act 2017:** it provides the rights of mentally challenged during delivery of mental healthcare and services.

## The Rehabilitation Council of India Act, 1992:

◈ The Council act regulates and monitors the training of rehabilitation professionals and personnel and promotes research in rehabilitation and special education.

◈ **National Action Plan for Skill development:** It aims to cover 2.5 million persons with disabilities by the year 2022 through various stakeholders.

## Related Schemes:

◈ **Scheme for Implementation of Persons with Disabilities act (SIPDA):**

➤ To provide financial assistance to the states for implementation of act.

◈ **RashtriyaVayoshriYojana:**

➤ It ensures Physical Aids and Assisted-living Devices for Senior citizens belonging to BPL category.

◈ **Accessible India Campaign:**

➤ To help make buildings and other infrastructure disabled friendly.

◈ **SugamyaPustakalaya**: Online library for persons with disabilities.

◈ **Assistance to Disabled Persons for Purchase/ Fitting of Aids and Appliances (ADIP) Scheme**: it ensures distribution of aids and assistive devices.

◈ **Economical measure:** creation of National fund for Person with disabilities.

◈ **Other Measures:**

➤ **Corporate Social responsibility:** Deendayal Disabled Rehabilitation Scheme: Promote Voluntary Action by releasing grant-in aid to NGOs.

## Existing loopholes

◈ **Definition of Disability in India:** The definition of disability which is approved in India is ambiguous and problematic.

◈ **Gender Aspect**: Biologically, it is true that disability affects all irrespective of one's gender identity. However, it is important to see that the socio-cultural aspects and the repercussions associated with disability are affected by gender concerns

◈ **Caste issues and disability**: The 2011 census states that disability is higher among the scheduled castes in all age groups.

◈ **Urban-rural divide**: The 2011 census states that the population of disabled is higher in rural areas than that of the urban areas.

## Way Forward:

◈ **Preventive programs**

➤ All children health related screening at a young age. (Kerala as a role model)

◈ **Disabled adults need to be empowered with employable skills.**

➤ The private sector needs to be encouraged to employ them.

◈ **Safety measures**

➤ IT includes road safety, safety in residential areas, public transport system etc, should be taken up.

◈ Institutional monitoring mechanisms and accountability of public funds.

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## THE COMPLEXITIES OF REMISSION POLICIES: A CASE STUDY OF BILKISBANO AND THE SUPREME COURT'S INTERVENTION

**Context:** Recent judicial proceedings have brought the remission policies of the Indian legal system under scrutiny, particularly in the case of 11 convicts involved in the gang rape of BilkisBano during the 2002 Gujarat communal riots.

❖ **Concepts involved**: Clemency powers, the application of remission policies, and the need for adherence to legal procedures.

### Legal and Constitutional Provisions:

❖ The constitutional provisions under Article 72 and 161 empower the President and Governor, respectively, **to grant pardon, commutation, remission, respite, or reprieve to a convict**.

❖ Additionally, **Section 432 of the Criminal Procedure Code (CrPC) allows the appropriate State government to remit a convict's punishment**, subject to certain conditions.

❖ Notably, **life imprisonment convicts can only be considered for remission after serving 14 years**, as per Section 433A of the CrPC.

❖ **"Remission" in this context refers to the reduction or mitigation of the sentence** or penalty imposed on a person.

❖ It allows the **executive authorities to use their discretion** in considering factors such as the nature of the offense, the conduct of the convict, and other relevant circumstances to decide whether a reduction in the punishment is warranted.

### Bilkis Bano Case:

❖ The crimes in question occurred in Gujarat in 2002 but were later shifted to Maharashtra for a fair trial. In 2008, a CBI trial court in Mumbai sentenced the **11 convicts to life imprisonment**.

❖ In 2022, **Radheshyam Shah, one of the convicts, sought remission under Gujarat's 'Remission policy' of 1992**.

❖ Despite legal discrepancies, the Gujarat government **granted premature release to the convicts in August 2022**, leading to a legal and moral quandary.

### Current Debate:

❖ The premature release raised **legal concerns**, primarily as the remission application should have been considered by the appropriate State government, which, in this case, was Maharashtra, where the sentencing occurred.

❖ Furthermore, the **presiding judge's opinion, a mandatory requirement under the CrPC, was not sought**.

❖ The Supreme Court, in its previous rulings such as **LaxmanNaskar versus Union of India (2000) and Sangeet versus State of Haryana (2012)**, established guidelines for remission consideration.

❖ The court emphasized that remission should be granted on a **case-by-case basis** and not in a 'wholesale manner.'

❖ The Gujarat government's 2014 revision of the **'Remission policy'** excluded remission for those convicted of rape and murder, but the 2022 remission was based on the 1992 policy without such exclusions.



### Supreme Court's Ruling:

❖ In its recent order, the Supreme Court unequivocally declared the Gujarat government as **inappropriate for considering the remission petitions**.

❖ The court deemed its previous order, directing the Gujarat government to consider the petitions, **as null and void due to fraud and suppression of facts**.

❖ The **11 convicts were ordered to surrender to jail authorities within two weeks**.

❖ The Supreme Court's ruling has reaffirmed faith in the judicial system and the **'rule of law.'**

❖ The Maharashtra government is now tasked with considering the remission petitions in accordance with legal guidelines, particularly those outlined in the LaxmanNaskar case, emphasizing that crimes affecting society at large deserve no wholesale mercy.

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◈ This case highlights the importance of **strict adherence to legal** procedures and the need for consistent and updated remission policies in the Indian legal framework.

## CONTROVERSIES SURROUNDING INDIA'S NEW HIT-AND-RUN LAW

**Context:** Protests and debates surrounding Section 106 (2) of the BharatiyaNyayaSanhita, 2023, initiated by transporters and commercial drivers. Stringent measures in hit-and-run cases are necessary, but the protestors argue that the new law is flawed and requires reconsideration.

### Background:

◈ Transporters and commercial drivers, particularly from Maharashtra, Chhattisgarh, West Bengal, and Punjab, have voiced their opposition to **Section 106 (2) of the BharatiyaNyayaSanhita, 2023**.

◈ This provision imposes severe penalties, **including up to 10 years in jail and a fine**, for fleeing an accident scene without reporting it to the authorities.

◈ The protests highlight concerns about **unintentional accidents, challenging working conditions, and potential misuse of the law**.

◈ The protests emphasize the need for a **balanced approach** in the legislation concerning hit-and-run incidents.

◈ While acknowledging the **importance of strict actions in such cases,** the transporters argue that the current law lacks consideration for the practical challenges they face, such as long driving hours, difficult roads, and unforeseeable factors contributing to accidents.

### Key Highlights:

◈ **Protests and Impact**:Widespread protests among transporters, particularly truck drivers, have impacted multiple states, leading to **roadblocks, strikes, and disruptions**.

◈ **Demands of Protestors:**Transporters demand the **withdrawal or amendment of Section 106 (2)**, citing concerns about excessive penalties for unintentional accidents and the failure of the law to consider the challenging working conditions faced by drivers.

### Road Accidents in India:

◈ The protests occur against the backdrop of **alarming statistics** related to road accidents in India. In 2022, the country witnessed over 1.68 lakh road crash fatalities, averaging 462 deaths daily.

◈ Despite **a global decrease, India experienced a 12% increase in road accidents** and a 9.4% rise in fatalities.

◈ The economic loss due to road crashes amounts to **5-7% of India's GDP annually**.

### Principle Underlying the Law:

◈ Section 106 (2) aims to **enforce moral responsibility** on offenders involved in hit-and-run incidents.

◈ The law obligates the offender to report the incident to the authorities, **emphasizing the need for accountability and adherence to legal duties**.

### Justification for Stringency:

◈ The **National Crime Records Bureau recorded 47,806 hit-and-run incidents in 2022**, resulting in 50,815 deaths.

◈ The stringent punishment aims to deter drivers from **engaging in rash and negligent driving** that can lead to fatal accidents.

◈ **Contested Provisions and Ambiguities:** Protestors contest the imprisonment **of up to 10 years and a fine of ₹7 lakh mentioned in Section 106.**

### The Way Forward:

◈ Addressing the concerns raised by the **protestors requires a careful reassessment of Section 106 (2). Revisiting and reconciling** the clauses to ensure fair treatment of truck drivers and other vehicle operators.

◈ **A graded liability system based on the nature of accidents and contributing factors could provide a more nuanced approach**.

◈ Additionally, **clarity on the applicability of Section 106 (2) in cases of grievous injuries versus fatalities is essential** for a more just implementation of the law.

◈ Road accidents in India remain a significant **public health concern**.

◈ The World Health Organization (WHO) reports that India has one of the **highest road traffic death rates globally**.

◈ Factors contributing to road accidents include i**nadequate road infrastructure, non-compliance with traffic rules, inadequate law enforcement, and the lack of awareness about road safety**.

◈ Statistics from the WHO reveal that road traffic injuries are **the leading cause of death among individuals aged 5-29 years in India.**

◈ Vulnerable road users, such as **pedestrians, cyclists, and motorcyclists, are disproportionately affected**.

◈ Efforts to reduce road accidents should involve a **holistic approach**, including improved road design, stricter enforcement of traffic laws, public awareness campaigns, and the incorporation of advanced safety features in vehicles.

◈ **Education and awareness programs** aimed at fostering a culture of road safety are crucial for reducing accidents and saving lives.

◈ Additionally, **leveraging technology for better traffic management, surveillance, and emergency response can contribute to creating safer road environments**.

◈ Addressing the concerns of transporters and improving road safety in India require **collaborative efforts from policymakers, law enforcement agencies, and the public**.

◈ A comprehensive strategy that combines **legal measures, infrastructure development, and awareness campaigns** is essential for achieving significant and sustainable reductions in road accidents and fatalities.

## UNREST IN MANIPUR: KUKI–ZO TRIBE'S SCHEDULED TRIBE STATUS SPARKS CONFLICT

**Context:** **The state of Manipur in India is currently grappling with ethnic tensions, particularly surrounding the proposed reconsideration of the Scheduled Tribe (ST) status of the Kuki-Zo community.**

### Background:

◈ The Manipur conflict, which commenced in early May, stemmed from a **High Court order suggesting the consideration of ST status for the Meitei community**.

◈ This proposition faced **opposition from the Kuki-Zo tribe**, who perceive it as a potential dilution of their privileges due to the political and numerical dominance of the Meiteis in the state.

◈ Chief Minister's suggestion to **review ST status** has triggered strong reactions from Kuki-Zomi organizations, intensifying the ongoing ethnic conflict in the region.

### Need for Review:

◈ The controversy emerged when Maheshwar Thounaojam, a Meitei leader of the Republican Party of India (Athawale), submitted a **representation to the Union Ministry of Tribal Affairs, urging the exclusion of Kukis from Manipur's ST list**.

◈ The Ministry forwarded the representation to the state government, emphasizing the **need for the state's recommendation before any further action**.

### Government's Response:

◈ Possibility of forming **a committee to discuss the ST status of Kukis in Manipur**.

◈ This move, however, has been met with strong opposition from Kuki-Zomi organizations, accusing the **state government of supporting Meiteis and exacerbating the existing ethnic conflict**.

### Kuki-Zo Tribe's Perspective:

◈ The **Indigenous Tribal Leaders' Forum (ITLF) and KukiInpi, the apex body of Kuki tribes in Manipur**, condemned any attempt to alter the ST status of the Kuki-Zo community.

◈ The ITLF accused the government of **a coordinated effort with Meitei groups**, asserting that removing the community from the ST list violates constitutional safeguards and perpetuates injustice and discrimination.

### Zomi Council Steering Committee's Opposition:

◈ **The Zomi Council Steering Committee (ZCSC) joined the condemnation**, considering the move a blatant attempt to rewrite history and widen existing divides.

◈ The ZCSC also opposed Chief Minister request to remove the **Free Movement Regime along the Myanmar border**, viewing it as a diversion from addressing the root cause of ethnic violence – the Meitei community's hunger for ancestral tribal lands and privileges.

### Kuki-Zo Tribe:

◈ The Kuki-Zo tribe, primarily **residing in Churachandpur district**, has a rich cultural heritage.

◈ Comprising various tribal bodies, the **ITLF serves as a significant voice for the Kuki-Zo community**.

◈ Their demand for **preservation of ST status aligns** with their commitment to upholding constitutional safeguards and protecting their rights and land.

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## SC SEEKS RESPONSE ON GST COUNCIL'S 28% GST ON ALL ONLINE REAL MONEY GAMING PLATFORMS

**Context:** A three-judge Bench headed by Chief Justice of India sought a response from the Directorate General of Goods and Services Tax Intelligence based on the plea by Dream 11, Games 24x7, and Head Digital Works for imposing the 28% GST on all online money gaming platforms.

### Online Gaming

◈ **Brief Overview:** Online games as "a game that is offered on the internet and is accessible by a user through a computer resource or an intermediary."



### Historical background

◈ Online games are administered by the Public Gambling Act 1867 and the Information Technology Act 2000, which regulates online gaming activities in India.

◈ Section 66 of the IT Act 2000 looks in the crime related to computers.

◈ Section 67, 67A, and 67B of IT Act deal with the discretion to make laws on the subject of online gaming, as gambling and betting are included in the state list of the constitution.

◈ Various state government also formulated laws such as Bombay Prevention of Gambling Act, 1887 to regulate the online gaming

### Key Debate: Game of skill vs Game of chance

◈ Online games which uses human intellect, i.e skill, are called 'game of skill' is legal in India.

◈ Online games played using chance where results are obtained by a chance not using human intellect is a 'Game of chance' which is not legal in India , that's why gambling and betting is not legal in Indian states,

### Major concerns:

#### Issue of Cyber bullying:

◈ Through Harmful and derogatory messages ,global spam which may lead to suicide and self-harming behaviour

◈ Due to easy to use models, minors can be harmed without information.

#### Social Issues;

◈ Recently large number of People losses the large sum of money through Online gaming.

◈ Most of the user does not aware about the potential risk involving the Privacy violations(Article 22)

#### Regulatory Framework:

◈ Aspect of grievance redressal mechanism, Personal Data Protection is not adequate ( anonymity of the Participant )

◈ **Unnecessary Regulations**: Govt. imposes 28% GST on all platform lowers the natural growth of the sector.

### Way Forward:

#### Limited Oversight

◈ Industry specific checks and Balance can be included

◈ User friendly KYC and anti-money laundering regulations.

◈ Limits minors from accessing manipulating games under parents guidance.

#### National level Regulatory body

◈ A Gaming Authority at the central level should be created. It could be made responsible for the online gaming industry

#### Balancing the economic opportunity and social cost

◈ More and more youngsters are getting hooked on online games. Considering this, the Online gaming industry needs to be relaxed regulated in India. However regulation of online gaming should also address its social costs.

◈ **Awareness campaign:** Proactive Approaches and Parent led Locking unlocking through OTP

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# INCOME INEQUALITY DECLINES, SAYS SBI RESEARCH UNIT

**Context:** Income inequality has declined in India with a higher tax base and a shift in taxpayers from lower income to higher income tax bracket, the Economic Research Department of the State Bank of India said in a report.

## Key Highlights –

### Shift in Taxpayer Dynamics

◈ The **Economic Research Department** of the State Bank of India reports a **decline in income inequality** in India.

◈ The shift in taxpayers from **lower to higher income tax brackets** contributes to this decline.

### Taxpayer Migration and Additional Income

◈ Approximately **36.3% of taxpayers** have moved from lower to higher income tax brackets, resulting in a substantial **21.3% increase in overall income**.

◈ The **top 2.5% of taxpayers' contribution** to income declined from **2.81% in FY14 to 2.28% in FY21.**

◈ **Individual taxpayers** in the income range of Rs 5 lakh to Rs 10 lakh experienced a remarkable **295% increase in income** between AY 2013–14 and AY 2021–22.

### Changing Landscape of Firms and Consumption Trends

◈ Small firms **transitioning** into **larger entities** through MSME value chain integration.

◈ Consumption trends, such as the **surge in food orders** through platforms like Zomato, indicate a **diminishing wealth gap.**

### Top Taxpayers' Share and Trends

◈ In FY14, the combined income of the **top 23 individuals** with earnings over Rs 100 crore was 1.64% of the total income, **dropping to 0.77%** with 136 individuals in FY21.

◈ Growth is observed across income classes, reducing skewness and converging incomes towards the middle.

### Decline in Two-Wheeler Sales and Substitution Effect

◈ Refuting claims that declining two-wheeler sales signify rural distress, the report highlights **a preference shift to four-wheelers.**

◈ Auto loans remain robust, with credit deployment at 1.8 times the pandemic level.

### Female Tax Filers and Geographical Disparities

◈ **Female tax filers** constitute around **15%** of individual tax filers.

◈ Certain states like **Kerala, Tamil Nadu, Punjab, and West Bengal** have a **higher share of female tax filers**, warranting further investigation for broadening tax base.

### Consumption Trends and Refutation of Distress Claims

◈ **Consumption patterns**, including data from Zomato, challenge claims of widespread distress.

◈ Around 0.44 crore active Zomato users in semiurban areas suggest rising income groups transcending conventional boundaries.

### Income Tax Return (ITR) Filing Trends

◈ ITRs filed by individuals earning between Rs 10 lakh and Rs 25 lakh increased by 291%.

◈ The total number of persons filing income tax rose to 7.4 crore in AY23 from 7 crore in AY22.

### Gini Coefficient and Overall Income Inequality

◈ The Gini coefficient for taxable income decreased significantly from 0.472 to 0.402 during FY14FY22, indicating a reduction in overall income inequality.

# THE GOVERNMENT HAS TRAPPED PROJECT TIGER, NOW 50, IN A TOUGH SPOT

**Context:** Violations of the Wildlife (Protection) Act and the Forest Rights Act have exacerbated conflicts in Tiger Reserves between the forest bureaucracy and forest-dwellers

## The Complex Dynamics of India's Tiger Conservation: Balancing Successes and Challenges

◈ India's **Project Tiger**, launched in 1973, has been celebrated as a **global success story** in **environmental conservation**, but it comes with its **set of challenges and conflicts**.

◈ The subsequent **legal frameworks**, particularly the **Wildlife (Protection) Act** and **the Scheduled Tribes and Other Traditional Forest Dwellers Act**, have played pivotal roles in shaping the landscape of tiger reserves in the country.

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## I. Evolution of Tiger Reserves:

◈ *1973 - **Project Tiger Inception***: Aims and initial implementation.

◈ *2006 - **Statutory Recognition***: Tiger Reserves elevated to statutory status, marking a turning point.

◈ *2022 - **Impressive Growth***: From 9 reserves in 1973 to 54 in 2022, covering 2.38% of India's land area.

◈ ***Tiger Population:*** 1972 - 1,827 tigers; 2022 - 3,167-3,925 tigers. India claims three-quarters of the world's tiger population.

## II. Legal Framework and Amendments:

◈ *1972 -**Wildlife (Protection) Act:*** Establishment **of National Parks** and **Wildlife Sanctuaries**.

◈ *2006 -**Tiger Task Force:*** Acknowledging failures and amending the Wildlife (Protection) Act to create the **National Tiger Conservation Authority (NTCA).**

◈ *2006 -**Scheduled Tribes and Other Traditional Forest Dwellers Act:*** Recognizing customary forest rights, introducing '**Critical Wildlife Habitat**' (CWH).

## III. Critical Tiger Habitats (CTH) and Buffer Areas:

◈ ***Original Intent:*** Democratic and scientific basis for Tiger Reserves.

◈ ***CWH Establishment:*** Scientific evidence of **irreversible damage guides CTH** establishment.

◈ ***Buffer Area Importance***: Balancing **human-animal coexistence** while respecting local rights.

◈ ***Problems in Implementation:*** Lack of **informed consent leading to conflict**.

## IV. Relocation and Rehabilitation Challenges:

◈ ***Legal Framework:*** Provisions of Wildlife (Protection) Act and Scheduled Tribes and Other Traditional Forest Dwellers Act.

◈ ***Compensation Issues:*** Discrepancies between **legal requirements and government initiatives**.

◈ ***Relocation Plans:*** Limited to the **2008 Revised Guidelines**, falling short of legal mandates.

## V. Conflict Resolution and Challenges Ahead:

◈ ***Recognition of Forest Rights***: Resistance within Tiger Reserves to the recognition of forest rights.

◈ ***Guidelines for CTH:*Conflicting orders and resolutions** regarding rights recognition.

◈ ***Environmental Clearance Controversy:*** Discrepancies in requiring **clearances for public utilities**.

◈ ***Future Challenges:*** Anticipating **anxiety and conflict** as tiger habitats expand.

## Way Forward:

◈ India's journey in tiger conservation reflects a **delicate balance between environmental preservation and the rights of indigenous communities**.

◈ As tiger habitats grow, the need for a **comprehensive and inclusive approach** becomes paramount to **avoid conflicts that could undermine the success of Project Tiger**.

## SISAL LEAVES AND SUSTAINABLE SANITARY NAPKINS IN INDIA

**Context:** **A team led by Manu Prakash at Stanford University has found the absorption capacity of a sisal-based material to be higher than those in commercial menstrual pads**

### *Sisal Leaves: A Sustainable Solution for Menstrual Hygiene Products*

◈ **Ancient Roots to Modern Innovation***The **ancient Aztec and Mayan civilizations** pioneered the use of sisal leaves for various applications. Today, scientists at Stanford University leverage sisal leaves to create an environmentally **sustainable material for menstrual hygiene products***.

◈ **A Green Alternative to Conventional Menstrual Pads***Stanford researchers propose a method using sisal leaves to produce a **highly absorbent material, potentially replacing cotton, wood pulp, and synthetic absorbents** in sanitary napkins.*



### Data and Information:

### Absorbent Material Development:

◈ The study, published in **Nature Communications Engineering**, outlines a method that uses **sisal leaves for creating a material with superior absorption capabilities**.

❖ The material is positioned as a **potential alternative to conventional components** like cotton, wood pulp, and synthetic superabsorbent polymers (SAPs) in sanitary napkins.

## Environmental Sustainability:

❖ The sisal-based method claims to use **no polluting or toxic chemicals** during production.

❖ Researchers emphasize that the **process can be conducted locally at a small scale**, offering an **environmentally sustainable solution**.

❖ The study discusses the **environmental impact**, comparing the **carbon footprint of sisal-based production** to **conventional methods using timber and cotton**.

## Application in Menstrual Hygiene:

❖ The research aims to address **environmental concerns related to menstrual hygiene product waste**, particularly **non-biodegradable components**.

❖ Sisal's absorbent qualities make it a potential candidate for producing sustainable menstrual pads, **reducing reliance on wood pulp and synthetic materials.**

## Global Collaboration for Testing:

❖ The team at Stanford is collaborating with a **Nepal-based NGO** to test the scalability of their **sisal-based method** for **mass production of sanitary napkins**.

❖ A global program involving high school students encourages testing the usability of similar processes with various local plants, contributing to a public database.

## Water Use and Sustainability:

❖ Sisal cultivation is noted for requiring **less water compared to cotton**, contributing to potential long-term sustainability.

❖ The study indicates a "**25-fold difference**" in water use between cotton and sisal.

## Challenges and Quality Assurance:

❖ Experts highlight the need for robust research to ensure plant **fiber-based menstrual hygiene products** meet existing quality standards.

❖ The team is implementing "**distributed quality control**" and "**distributed manufacturing**" to address concerns and create local, sustainable solutions.

## Way Forward:

❖ The **innovative use of sisal leaves** presents a promising avenue for creating **sustainable menstrual hygiene products.**

❖ As researchers explore **scalable production** and **engage global collaboration**, sisal-based materials could contribute to a more environmentally conscious approach to menstruation.
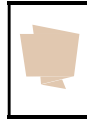
## MAJORITY OF CITIES FAR FROM CLEAN AIR TARGET

**Context:** In 49 cities whose particulate matter numbers were consistently available for five years, 27 cities showed a decline in PM 2.5, while only four had met or exceeded the targeted decline, according to the analysis

### Assessment of India's National Clean Air Programme Reveals Mixed Progress

❖ **Overview of National Clean Air Programme (NCAP)**An analysis by Respirer Living Sciences and Climate Trends sheds light on the progress of India's ambitious National Clean Air Programme (NCAP), aiming to reduce particulate matter concentrations by 40% by 2026.

❖ **Varied Performance Across Cities**Among 49 cities with consistent PM 2.5 data for five years, only four have met or exceeded the targeted decline. Cities like Delhi, Navi Mumbai, and Mumbai report marginal declines or even increases in pollution levels, posing challenges to NCAP's objectives.

### Data and Information:

### NCAP Goals and Shift in Deadlines:

❖ NCAP initially aimed for a 20-40% reduction in pollution by 2024 but later extended the deadline to 2026.

❖ The program targets a 40% reduction in average particulate matter concentrations in 131 cities compared to 2017 levels.

### City-wise Progress and Challenges:

❖ Delhi, despite efforts, observes a mere 5.9% decline in annual PM 2.5 levels.

❖ Navi Mumbai records a concerning 46% rise, while Mumbai and Ujjain report 38.1% and 46% increases, respectively.

❖ Some cities in Uttar Pradesh, including Varanasi, Jodhpur, and Kanpur, show more than a 40% reduction in PM 2.5 levels.

### Impact of Monitoring Stations:

❖ The availability and spread of continuous ambient air quality monitors significantly influence reported pollution levels.

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◈ Cities like Mumbai and Delhi, with numerous monitoring stations, provide a more comprehensive picture compared to those with fewer than five stations.

## Geographical Influences and Meteorological Factors:

◈ Variations in PM 2.5 and PM 10 levels are attributed to geographical locations, diverse emission sources, and meteorological influences.

◈ Cities in the Indo-Gangetic Plain (IGP) continue to dominate the list of top 20 cities with the highest PM 2.5 levels.

## Unclear Impact of Actions:

◈ While reductions in PM 2.5 and PM 10 levels are noted in some highly polluted cities, the actual translation of cities' actions into improved air quality remains unclear.

◈ Strengthened monitoring, as cities add new air quality stations, is expected to provide a clearer understanding of the effectiveness of mitigation measures.

## Way Forward and Analysis:

◈ Despite positive strides in addressing air pollution, persistent challenges exist as some urban areas experience an increase in pollution concentrations.

◈ The revised goal of a **40% reduction in particulate matter** by **2026 reflects the commitment** to ambitious environmental targets.

◈ The analysis underscores the need for o**ngoing efforts, strengthened monitoring, and comprehensive strategies** to achieve **the NCAP objectives** and enhance air quality across Indian cities.

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## UPHOLDING VALUES AND ETHICS IN HIGHER EDUCATION: A CRITICAL EXAMINATION OF MULYAPRAVAH 2.0

**Context:** The recent initiative by University Grants Commission's (UGC) : Mulya Pravah 2.0 on the importance of transparency, accountability, and ethical conduct in higher education institutions.

## Background:

◈ The UGC, in its pursuit of fostering ethical practices, introduced MulyaPravah 2.0, an evolved version of **the 2019 MulyaPravah**.

◈ The guideline aims **to instill human values and professional ethics** in higher education, addressing issues highlighted in a survey of human resource managers, such as unethical practices in hiring, training, and gender discrimination.

◈ **Need:** Corruption and ethical violations in admission, examinations, and university administration continue to plague the higher education system.

## Key Highlights:

### Emphasis on Transparency:

◈ MulyaPravah 2.0 stresses the need for **transparency in administration**, urging decision-making to be guided solely by institutional and public interest.

◈ It emphasizes the **abolition of discriminatory privileges** and calls for swift actions against corruption.

### Core Values and Integrity:

◈ The guideline outlines the essential values for higher education institutions, including **integrity, trusteeship, harmony, accountability, inclusiveness, commitment, respectfulness, belongingness, sustainability, constitutional values, and global citizenship**.

### Confidentiality and Information Disclosure:

◈ While emphasizing confidentiality, higher education institutions should voluntarily disclose **critical information, agendas, proceedings, minutes of meetings, annual reports, and audited accounts** to the public domain.

◈ This can **deter malpractices and enhance public confidence**.

### Role of Teachers:

◈ Recognizing teaching as a noble profession, MulyaPravah 2.0 expects teachers to act as **role models**, setting examples of good conduct, dress, speech, and behavior.

◈ It encourages **adherence to institutional rules** but remains silent on the issue of teachers' associations.

### Involvement of Unions and Support Groups:

◈ The guideline expects **staff and student unions to support administration** in development activities and raise issues in a dignified manner.

◈ However, the **expectation that unions act as the team B of the administration** and the importance of allowing stakeholders to participate proactively in decision-making can prove to be a double edged sword.

◈ Concerns are being raised about **potential misuse and threats** to associations and unions of teachers, staff, and students.

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◈ It calls for a **careful consideration of provisions that might cause more harm than good**.

## Importance of Ethics in Higher Education:

◈ It's crucial to recognize that ethics in higher education is fundamental to the holistic development of **students, the credibility of institutions, and the overall advancement of society.**

◈ Ethical practices contribute to a **positive learning environment, fostering critical thinking, integrity, and responsible citizenship.**

◈ Ethics in higher education goes beyond **compliance with regulations**; it involves nurturing a culture of academic honesty, intellectual integrity, and social responsibility.

◈ Institutions must **prioritize the development of ethical leaders** who can navigate complex challenges with integrity and contribute meaningfully to society.

◈ Moreover, an **ethical higher education system attracts and retains high-caliber faculty and students,** enhancing the institution's reputation.

◈ **Collaboration between academia and industry thrives when built on ethical foundations**, fostering innovation, research integrity, and societal impact.

◈ The integration of values and **ethics in higher education is not only a regulatory requirement but a cornerstone** for building a responsible, sustainable, and impactful educational ecosystem.

◈ Initiatives like **MulyaPravah 2.0, when implemented effectively, contribute to the broader goal** of shaping ethical leaders and fostering a culture of excellence in higher education.

◉◉◉◉◉

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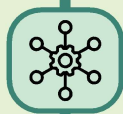
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# Section *B* [SPECIALS]

| Topic |
|-------|
| ❧ Insolvency and Bankruptcy Code 2016 : from past to Present |

## INSOLVENCY AND BANKRUPTCY CODE 2016 : FROM PAST TO PRESENT

### Objectives:

◈ The IBC provides comprehensive legal framework for insolvency and bankruptcy proceedings which has completed 7 years since its introduction as IBC code in 2016.

◈ Establishing a consolidated framework for insolvency resolution of corporations, partnership firms and individuals in a time-bound manner, seeks to tackle the non-performing asset (NPA) problem in two ways.

### Need of IBC: Historical Background

◈ Earlier existing mechanism such as were complex, fragmented And overlapping authority hindering the resolution proceedings**.**

◈ Acts such as Companies act. 1956, the Sick Industrial Companies (Special Provisions) Act, 1985, the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act), the Recovery of Debts due to Banks and Financial Institutions Act (RDDBFI Act), 1993 and others were available to deal with insolvency proceedings**.**

◈ They generally dealing with the broad guideline and mechanism while insolvency procedures require the time bound resolutions in more specified manner considering the rising NPA.

> **Basics Background of Insolvency Mechanism: why IBC and how?**
>
> ● India's NPA ratio is among the highest with comparable countries.(5.9% as of 2022) Additionally Twin Balance sheet problem were hampering the economy and health of Banks. **IBC** Provides the Basic solutions to these Major Issues which hammers Indian economy growth
>
> ● **Non-performing Assets (NPA):** When a person delays the payment of the loan or an amount which was due on him through the delay in payment in either interests or installments or principal amount, that particular loan or amount is termed as Non-Performing Asset.
>
> ● Any defaulted or arrears loans or advances will be categorized as non-performing assets (NPA) when it completes the period of 90 days without repayment

### Three major types of NPA based on Non Repayment Period

| Substandard Assets | Assets which are NPA for a period of less than or equal to 12 months |
|---|---|

| Doubtful Assets | Assets which are substandard category for a period of 12 months |
|---|---|
| Loss Assets | Assets which have very low value, it can no longer continue as a bankable asset, there could be some recovery value. |

### Insolvency Mechanism

◈ IBC, a framework for initiating an insolvency resolution process when a debtor is unable to pay its debts. It consist of a two-step process for corporate debtors facing insolvency with a minimum default amount of **Rs. 1,00,00,000.**

◈ **Step1: Insolvency Resolution Process:** It is creditor led process that evaluates various options for the company's revival and take n necessary measures accordingly.

◈ **Step2: Liquidation:** If revival attempts fail or unviable, creditors can opt for winding up the company. At this stage debtor's assets are distributed among the creditors in accordance with the Code's provisions.

### Philosophy Behind introduction

◈ To streamline and expedite the insolvency resolution process in India.

◈ Inculcate behavioural change to debtors to ensure sound decision-making and to stabilise the Businesses

◈ To give right to recovery of debt in speedy and holistic manner to creditors

◈ Focuses from debtor-in-control' to 'creditor-in-control'.

◈ To resolve non-performing loans at debtor, a major concern for creditor.

### Institutional Framework:

#### Insolvency and Bankruptcy Board of India (IBBI)

◈ It works as the regulator for Insolvency Professionals, Insolvency Professional Agencies, Insolvency Professional Entities and Information Utilities.

◈ It also writes and enforces rules for processes, corporate insolvency resolution, corporate liquidation, individual insolvency resolution and individual bankruptcy under the Code.

◈ It members includes the Reserve Bank of India, as well as the Ministries of Finance, Corporate Affairs, and Law.

Framework of IBC-Adjudicating Authority
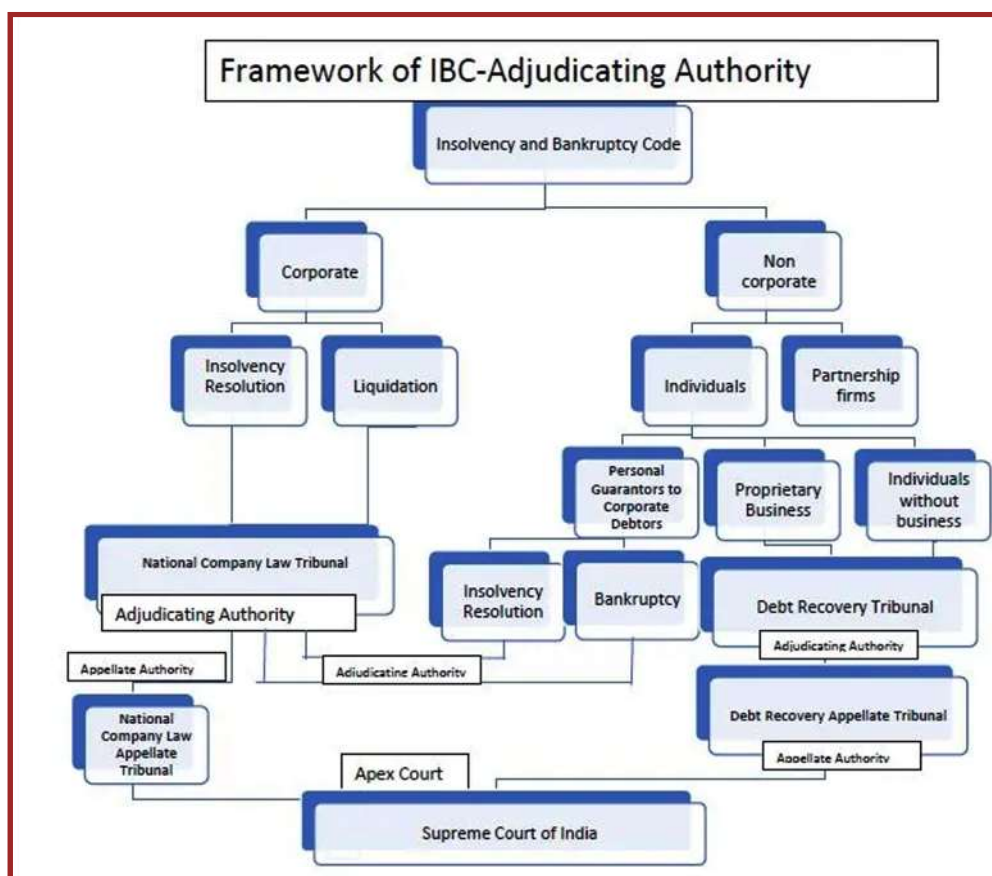
◈ **Insolvency Professionals:** A specialized group of licensed professionals, they manages the resolution process, assess debtor's assets value and provides essential information to creditors to for informed decision making

◈ **Insolvency Professional Agencies:** Insolvency professionals are affiliated under insolvency professional agencies. It conducts the exams and enforces a code of conduct for IPs

◈ **Information Utilities:** They records the debts own to debtor which is informed by the creditors, it includes information includes comprehensive records of debt, liabilities, and defaults.

## National Company Law Tribunal (NCLT):

◈ It is the sole Adjudicatory Authority responsible for handling **all corporate insolvency** proceedings under the Insolvency and Bankruptcy Code.

◈ No other court or tribunal has the power to grant a stay against actions initiated before the NCLT.

◈ Appeals against NCLT orders are directed to the National Company Law Appellate Tribunal (NCLAT), and any further appeals from NCLAT order can be file in the Supreme Court of India.

◈ It strictly removes the jurisdiction of civil courts concerning matters governed by the Code.

## National Company Law Appellate Tribunal (NCLAT):

◈ It is the adjudicating authority which listens the Appeals against NCLT orders and any further appeals from NCLAT orders are heard by the Supreme Court of India. The Code explicitly removes the jurisdiction of civil courts concerning matters governed by the Code.

◈ **Committee of Creditors (COCs**): It is formed by the Interim Resolution Professional once the Corporate Insolvency Resolution Process(CIRP) is initiated against a Corporate Debtor. Committee of Creditors (CoC) is a committee consisting of Financial Creditors of the Corporate Debtor.

## Key Stakeholders:

### Creditors:

◈ **Under the Insolvency and Bankruptcy Code, 2016, a "creditor"** means any person to whom a debt is owed, and includes among others, a **financial creditor, an operational creditor, a secured creditor, and an unsecured creditor.**

◈ **Financial creditors:** Financial Creditor-As per Section 5(7) "financial creditor" means any person to whom a financial debt is owed. As per Section 5(8) of the Code, "financial debt" means a debt along

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with interest, if any, which is disbursed against the consideration for the time value of money.

◈ **Operational creditors**: As per Section 5(20), "operational creditor" means a person to whom an operational debt is owed and includes any person to whom such debt has been legally assigned or transferred;

◈ **Secured creditor: Section 3(30) of the IBC defines** to mean a creditor in favour of whom security interest is credited.

◈ **Unsecured Creditors,** like credit card issuers, suppliers, and some cash advance companies (although this is changing), do not hold a lien on its debtor's property to assure payment of the debt if there is a default. The secured creditor holds priority on debt collection from the property on which it holds a lien.

◈ **Deep haircuts** – it includes writing off loans and accrued interest on the loan. The illustration below gives a glimpse of the so-called haircuts, which is actually a part of the loss to FCs.

## Case studies

◈ **NCLT led resolution plan resulted in the 0.92% recovery of debt resulted in deep haircut (**Reliance Communications Infrastructure Ltd. (RCIL)**).** Additionally It has taken four years to complete the Resolution Plan (RP) as against the stipulated maximum of 330 days.(these are the deep haircuts)

◈ only 5% of the loan been recovered by the banks(Videocon case)

## Current issues in effective IBC Implementation

◈ 60% of the IPs inspected were found to be indulging in malpractices.(**finding of parliament committee on finance )**

◈ **Slow disciplinary action** on 123 Insolvency Professionals (IPs) out of 203 inspections conducted till date.

◈ **Delays in Repayments** :During the resolution plan approval, only about 15% is paid by the purchaser and the repayment takes years without any further interest collected by the banks, according to the **(RBI's financial stability report)**

◈ An increase in the average resolution time from 324 to 653 days versus the stipulated 330 days

◈ **Lack of digitisation of the IBC ecosystem**. It led to the insolvency process beyond the statutory limits.

◈ **Deep Haircuts**: cases such as haircuts of as much as 95 per cent are being granted during the insolvency resolution.

◈ **Piling up of Backlogs** : 13,000 cases stuck in various stages of IBC resolution, significant delay in the pre-IBC admission stage (650 days in fiscal 2022 increased from about 450 days in fiscal 2019)

◈ **lack of Clear Definition** It leads the vague interpretation of the code's provisions and the absence of clear precedents have posed challenges.

◈ **Different interpretations** It includes i NCLTs, appellate tribunals, and higher courts, have created ambiguity and inconsistency, leading to prolonged litigation and delays in resolving cases.

## Recent Positives amendments and achievements

◈ Now IBC allows approval for sale of assets/resolution plan on a segregated basis.

◈ the number of National Company Law Tribunal benches increased

◈ Sector-specific amendments, provision for audit of corporate debtor, and modifications in Form-G2 will also improve the process

◈ A whopping 18,629 applications seeking more than ₹5,29,000 crore are noted to have been resolved even prior to being admitted.

◈ Post the implementation of IBC, as per the World Bank's report, India's rank in resolving insolvency went from 136 in 2017 to 52 in 2020.

## Important supreme court judgments

◈ **SC in Mobilox Innovations Vs Kirusa** held that the operational debt should be free from any pre-existing dispute.

◈ **The Supreme Court in Kridhan Infrastructure Vs Venketesan Sankaranarayan**, held that the insolvency resolution should not suffer from an indefinite delay without any legitimate cause wrt. the timelines fixed under the IBC.

◈ The IBC also bars certain individuals from submitting a resolution plan **The Supreme Court in Chitra Sharma Vs Union of India** held that it ensures no backdoor entry in CRIP proceedings.

◈ Though the National Company Law Tribunal (NCLT) is endowed with broad residuary jurisdiction under the IBC to decide upon all questions. However **SC in the Jaypee Kensington case** held that there was no scope for interference with the commercial wisdom of the CoC. If an adjudicating authority found any shortcomings it has to send back to the CoC for re-submission.

## Way forward

◈ IBC Requires improved operational infrastructure, providing clarity in legal interpretation.

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◈ It should ensure simple procedures, developing a robust insolvency ecosystem.

◈ To ensure effective insolvency, robust mechanisms for cross-border insolvency should bew in place.

◈ The RBI must also implement its own earlier decision to have a maximum ceiling of credit to a single corporate house at ₹10,000 crore.

◈ Continuous Improvement evaluation, stakeholder consultations, and timely amendments are necessary to overcome these challenges and make the IBC a more efficient and responsive framework for insolvency resolution in India.

◈ "The IBC's effectiveness can be increased using CDE approach, where C stands for Capacity augmentation, D for Digitalisation and E for Expansion of pre-pack resolutions to large corporates."(crisil)

◈ The government needs to cater appropriate budgetary allocations to upskilling insolvency professionals, improvement of tribunal infrastructure and digitisation of the insolvency resolution process.

◈ **Conclusion:** Though IBC has undoubtedly revived India's insolvency regime. It has also solved the twin problem of NPAs and deteriorating credit discipline. (₹2.5-lakh crore has been introduced back into the banking system from 2016 upon resolution of insolvencies under IBC). However, IBC also has areas that requires improvement such time bound resolution, exact value resolution (no deep haircuts) .

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# Section C [PRELIMS]

- ☙  Warli Tribe's Battle for Land: Clash with Shivaji Museum Project in Mumbai
- ☙  Beyond spice to medicine, culture, & more
- ☙  Argentina rejects invitation to join BRICS nations
- ☙  Arvind Panagariya Appointed Chairman of 16th Finance Commission
- ☙  "Viksit Bharat Sankalp Yatra" Boosts Beneficiary Numbers
- ☙  Scheme for Residential Education for Students in High Schools in Targeted Areas (SHRESHTA)
- ☙  COVID19 subvariants
- ☙  India is testing AI for improved weather forecasting
- ☙  India's GSAT-20 Satellite Set for SpaceX's Falcon-9 Launch, Elevating Space Connectivity
- ☙  Buxa Tiger Reserve, Tiger Spotted after 4 years

# ETIKOPPAKA TOYS

**Context:** In his Mann Ki Baat address Prime Minister made a mention about 'Etikoppaka toys' of Anakapalli district. Calling for India to become a global hub for toy production, with the slogan 'vocal for local toys.

## About the Toy

◈ Made in the Etikoppaka region of Andhra Pradesh, these toys are made with lacquer color and are traditionally known as Etikoppaka toys or EtikoppakaBommalu.

◈ The village is very famous for its toys made of wood. The toys are also called as lacquer toys because of application of lacquer coating.

◈ The toys are made out of wood and are coloured with natural dyes derived from seeds, lacquer, bark, roots and leaves.

◈ The wood used to make the toys is soft in nature and the art of toy making is also known as turned wood Lacquer craft. While making the Etikoppaka toys, lac, a colourless resinous secretion of numerous insects, is used.

◈ The already prepared vegetable dyes are further mixed to the lac, during the process of oxidation. After this process, the end product obtained is rich and colored lacquer.

◈ The lac dye is used for decorating the Etikoppaka toys, which are exported all over the world.

## Historical legacy

◈ The Etikoppaka toy industry is believed to be around 400 years old. D. SanniBabu, a 60-year-old senior artisan from the village, reminisces about the early days when some craftsmen made small wooden bowls and boxes for household purposes.

◈ These versatile items found utility in storing salt, turmeric, and other aromatic substances, with women especially preferring them for keeping 'kum-kum' or their precious gold jewellery.

◈ Initially, these wooden creations were sold at stalls near temples and during weekly markets, better known as 'vaaram - santha'.

◈ Over time, local kings, zamindars, and landlords began placing orders for these wooden products, utilising them both in kitchens and as decorative elements in homes. The turning point in their history came when artisans ventured into crafting toys for children.

# EXPLORING INDIA'S DIVERSE CULTURAL HERITAGE THROUGH GI TAGS

**Context:** Over 500 products across all the States have been given GI tags so far.

◈ The products ranged from handicrafts such as the DongariaKondh shawl from Odisha, to agricultural products such as the Sundarban Honey from West Bengal. A GI tag is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.

### What is a GI tag?

● A **GI tag** is a sign used on products that have a **specific geographical origin** and possess qualities or a reputation that are due to that origin.

● Any **trader's body, association, or organisation** can apply for a GI tag. The applicants need to prove the **uniqueness of the item** with historical records and a complete breakdown of how the product is made.

● GI tags are also not meant just for popular products. There are hundreds of GI tags across States.

● Every GI tag recognises a particular region and product and brings it to the public eye.

● It is important to note that the **raw materials for such products do not have to come from that region** (unless it is an agricultural tag).

● For instance, the leaf that gives the **Banarasipaan** its identity is not grown in Varanasi; it comes from Bihar, West Bengal, or Odisha.

● The mulberry silk used in **Kancheepuramsarees** comes from Karnataka and the gold zari from Surat.

● The products ranged from handicrafts such as **the DongariaKondh** shawl from Odisha, to agricultural products such as the Sundarban Honey from West Bengal.

## GI tags across States

◈ Every State in India has **at least one GI tag.** While GI tags are a proxy for unique cultural items, they are by no means exhaustive.

◈ If a State has more GI tags compared to another, it doesn't necessarily mean that it is more culturally rich; it just means that more items have been registered, with more to probably follow.

◈ **Tamil Nadu (61)** has the **highest number of GI tags** compared to other States. Uttar Pradesh has the **second highest** number of GI tags. (56).

◈ These include **leather footwear** from Agra, saddles from Kanpur, and the traditional embroidery art form of Chikankari from Lucknow.

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◈ **Karnataka with 48 GI tags**is ranked third, Kerala with 39 is ranked fourth, and Maharashtra with 35 is fifth.

◈ The Coimbatore wet grinder (to make batter for idlis) was given a GI tag under the "manufactured" category.

◈ Ancient cultural centres such as Banaras (Varanasi) are steeped in culture and tradition. Banaras offers 11 unique crafts and agricultural items (the highest from a single place), including the famous Banarasipaan.

◈ The heritage city of Mysuru, ruled for centuries by the Wodeyars, has 10 unique items, including the special variety of jasmine (Mysore mallige) and the fragrant sandalwood soap.

◈ Paintings from Thanjavur in Tamil nadu and the Thanjavur's iconic bobblehead dolls find a place among the five GI tags.

## HIGH–FREQUENCY WAVES DETECTED IN THE MARTIAN UPPER ATMOSPHERE COULD HELP UNDERSTAND PLASMA PROCESSES OVER MARS

### Insights from MAVEN

◈ Detection of **high-frequency plasma waves** in the Martian upper atmosphere.

◈ Novel narrowband and broadband features provide insights into plasma processes.

### Understanding Plasma Waves:

◈ Plasma waves observed in Earth's magnetosphere play a crucial role in **particle energization and transport.**

◈ **Electromagnetic ion cyclotron waves** act as a cleaning agent for Earth's radiation belt.

### Mars: An Unmagnetized Planet:

◈ **Mars lacks an intrinsic magnetic field**, leading to direct interaction with high-speed solar wind from the Sun.

◈ Researchers aim to understand the **existence of various plasma waves** in the Martian plasma environment.

### Research at Indian Institute of Geomagnetism (IIG):

◈ IIG researchers use high-resolution electric field data from **NASA's MAVEN spacecraft**.

◈ **MAVEN (Mars Atmosphere and Volatile Evolution Mission) provides** valuable data on the Martian plasma environment.



### Distinct Wave Modes at Martian Magnetosphere:

◈ Two wave modes identified with frequencies below and above the **electron plasma frequency.**

◈ Observations made around 5 LT on February 9, 2015, when **MAVEN crossed the magnetopause boundary.**

### Broadband and Narrowband Wave Features:

◈ **Broadband waves** exhibit periodic patchy structures with a **periodicity of 8–14 milliseconds**.

◈ Distinguishable features observed in the frequency domain for both **broadband and narrowband waves.**

### Significance of Observations:

◈ Waves provide a tool to explore **electron energy gain or dissipation in the Martian plasma environment.**

◈ Broadband-type wave generation and modulation mechanisms remain unexplained, requiring further investigation.

### International Collaboration:

◈ Research conducted by IIG scientists in collaboration with counterparts from **Japan, USA, and UAE.**

◈ Findings published in the **Astronomy & Astrophysics Journal**.

### Implications for Future Exploration:

◈ Understanding plasma waves enhances knowledge of **Martian atmospheric dynamics.**

◈ **MAVEN's contributions** crucial for ongoing and **future missions exploring Mars.**

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## Way Forward:

◈ **Detection of high-frequency plasma waves** in the Martian upper atmosphere contributes to advancing our understanding of **planetary plasma environments**.

◈ Ongoing collaboration and further research are essential for unraveling the mysteries of Martian magnetospheric dynamics.
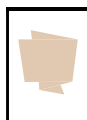
## MAYURBHANJ'S RED ANT CHUTNEY

**Context:** **The Similipalkai chutney made with red weaver ants by the tribal people of Odisha'sMayurbhanj district received the geographical identity tag.**

### The Red ant Chutney

◈ The savoury chutney is popular in the region for its healing properties and also deemed important for nutritional security of the tribal people.



◈ The scientists of **OUAT Bhubaneswar analysed the red weaver ants and found it contains valuable proteins, calcium, zinc, vitamin B-12, iron**, magnesium, potassium, sodium, copper, amino acids, among others.

◈ Consuming the species can help boost the immune system and prevent diseases. Many indigenous people from Mayurbhanj district venture into nearby forest to collect *kaipimpudi* (red weaver ant).

◈ Around 500 tribal families have been eking out a living by collecting and selling these insects and a chutney made with them.

◈ Red weaver ants are **collected from the nests along with their eggs and cleaned. After that, the chutney is prepared by mixing and** grinding salt, ginger, garlic and chillies. The hot chutney has a pungent and sour taste and is appetising.

◈ **Medicinal Properties:** Trials preparea medicinal oil in which they dip the ants along with pure mustard oil.

After a month, this **concoction is used** as a body oil for babies and to cure rheumatism, gout, ringworm and other diseases by the tribes.

➤ The local people also consume **this to stay fit and strong. They makes soups and other forms as well.**

➤ It is also consumed as a functional ingredient to cure various health problems like stomach ache, dysentery, cold and fever.

➤ known to improve appetite as well as enhance eyesight naturally.

### Nature's architects

◈ The red weaver ants form colonies with multiple nests in trees. Each nest is made of leaves stitched **together with the silk produced by their larvae.**

◈ **They mostly lodge in** trees like mango, sal, jambu and jackfruit. The nests are strong enough against wind and impermeable to water.

◈ Kai's nests are usually **elliptical in shape and range in size from single small leaf folded and bound onto itself to large nest consisting** of many leaves and measure over half a metre in length.

◈ **The Kai families consist of three categories of members** — workers, major workers and queens. Workers and major workers are mostly orange coloured.

◈ Workers are 5-6 millimetres long, major workers are 8-10 mm long with strong legs and large mandibles and queens are **20-25 mm long and greenish brown coloured**.

◈ They **feed on small insects and other invertebrates like beetles, flies** and hymenopterans. They do not sting but have **a painful bite into which they can secrete irritant chemicals from their abdomens.**

◈ **Ecological functioning:**They are also recognised as bio-control agents because they are aggressive and will prey on most arthropods entering their territory. They protect a variety of tropical crops against insect pests, acting as an alternative to chemical insecticides.

◈ **Availability:**The red weaver ants are indigenous to Mayurbhanj and are found in abundance in the jungles of every block area of the district, including in the Similipal Tiger Reserve.

◈ **Application for GI tag:**The application was made in 2020 for registration in Class 30 under sub-section (1) of section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

➤ Geographical indications assign products to the place of its origin. It conveys an assurance of quality and distinctiveness for such goods.

➤ Under Articles 1 (2) and 10 of the Paris Convention for the Protection of Industrial

Property, geographical indications are covered as an element of Intellectual Property Rights.

➤ They are also covered under Articles 22-24 of the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement.

## INDIA–NEPAL SIGNED POWER PACT AND ENERGY MOU

**Context:** **Nepal signed a long-term agreement for the export of 10,000 MW power to India in the next 10 years and an MoU for cooperation in renewable energy.**

### About the pact -

❖ India and Nepal reached a significant milestone in their bilateral relations by signing a ground-breaking power pact and a Memorandum of Understanding (MoU) in renewable energy.

❖ **The agreement,** signed during the 7th meeting of the Nepal-India Joint Commission, outlines a plan for Nepal to export 10,000 MW of power to India over the next decade. Simultaneously, an MoU for collaboration in renewable energy was inked between the Nepal Electricity Authority and India's National Thermal Power Corporation Limited.

### Deeper and multi-level cooperation

❖ This strategic move not only reinforces economic ties but also signifies a deeper level of cooperation in crucial sectors.

❖ The bilateral discussions between the countries covered various aspects, including trade, economic relations, connectivity projects, defense, security, agriculture, energy, power, water resources, disaster management, tourism, civil aviation, people-to-people exchanges, and cultural partnerships.

❖ The virtual inauguration of three cross-border transmission lines—132 kV Raxaul-Parwanipur, 132 kV Kushaha-Kataiya, and New Nautanwa-Mainahiya—underscores the collaborative efforts between India and Nepal in enhancing connectivity and infrastructure.

### Optimism and Vibrant relations

❖ India's External Affairs Minister expressed optimism about the multifaceted engagement, highlighting the positive impact on overall bilateral ties.

❖ The sentiment was echoed by Nepal's Prime Minister, who hailed the power agreement as a major breakthrough in Nepal's power sector.

❖ The main contours of India-Nepal bilateral relations include a comprehensive approach encompassing trade, economic cooperation, and shared development goals.

❖ This recent agreement not only addresses energy needs but also serves as a testament to the enduring friendship and mutual benefit between the two nations.

## HEALTH MINISTRY SEEKS DATA ON SINGLE WOMEN TAKING THE ASSISTED REPRODUCTIVE TECHNOLOGY ROUTE

**Context:** **The Ministry had also sought category-wise figures on couples and single women who opted for surrogacy successfully following the implementation of the Surrogacy Act, 2021.**

### Enhancing Transparency and Inclusivity in India's Fertility Sector

#### I. Ministry's Data Collection Initiative

❖ The Union Health Ministry in India has taken a significant step towards assessing the **effectiveness of recent reproductive healthcare legislation**.

❖ Specifically, the Ministry has sought comprehensive data from all States and Union Territories on the **utilization of Assisted Reproductive Technology (ART)** following the **implementation of the Surrogacy Act, 2021.**

#### II. Focus on Single and Unmarried Women

❖ In a noteworthy move, the Ministry has extended its inquiry to include a **breakdown of successful ART cases** among single women (divorcees/widows) and unmarried women.

❖ This **inclusive approach** has been welcomed by fertility experts, as it sheds light on a **previously underrepresented segment** of the population seeking fertility treatments.

#### V. The Role of the National Assisted Reproductive Technology and Surrogacy Board

❖ Established under the ART Act, **the National Assisted Reproductive Technology and Surrogacy Board** play a pivotal role in regulating ART clinics and technology banks.

❖ The Board aims to **prevent misuse, ensuring the safe and ethical practice of ART services**.

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◈ The Ministry has further reinforced the **regulatory framework** by notifying the **Assisted Reproductive Technology (Regulations) Amendment Rules, 2023.**

## VI. Addressing Concerns in the Fertility Sector

◈ While ART serves as a **crucial treatment for infertility and preventing congenital abnormalities**, concerns have arisen regarding parameters limiting the number of available donors.

◈ The fertility sector in India, mirroring global trends, faces challenges such as declining fertility rates and the rising costs associated with ART cycles.

## VII. Future Trends: Inclusion of Single Women

◈ Fertility experts anticipate a growing trend in the **inclusion of single women in ART procedures**.

◈ While currently in a nascent stage, inquiries from single women about **procedures like egg freezing** are expected to rise in the coming years.

◈ The Ministry's proactive approach in categorizing and analyzing successful ART cases among single and unmarried women reflects a positive and welcome trend in the evolving landscape of reproductive healthcare in India.

## REFUSAL OF ENFORCEMENT DIRECTORATE SUMMONS

**Context:** **Delhi Chief Minister and Jharkhand CM HemantSoren have declined Enforcement Directorate (ED) summonses in separate cases, citing various reasons. The ED, in response, faces legal intricacies regarding the nature of the summonses and the consequences of non-compliance.**

### Examination of Refusal and ED Summons in Focus

◈ Delhi CM in relation to the Delhi excise policy case, points to the ED's 'non-disclosure' and 'non-response' approach, along with the upcoming RajyaSabha elections and Republic Day celebrations. Similarly, HemantSoren(CM Jharkhand) has refused seven summonses in a money laundering case.

### Provisions of Summons and Powers of ED:

◈ The summonses are issued under Section 50 of the Prevention of Money Laundering Act (PMLA), empowering ED officials to inspect, enforce attendance, compel record production, and receive evidence.

◈ The provision specifies that the summoned individuals must attend in person or through authorized agents.

### Refusal Consequences:

◈ Refusing to appear may result in penalties under Section 63 (2) (C) of the PMLA, ranging from Rs 500 to Rs 10,000.

◈ Non-cooperation can also lead to proceedings under Section 174 of the Indian Penal Code, stipulating a jail term of one month and/or a fine of Rs 500.

### Arrest Possibilities:

◈ While arrest under Section 63 of the PMLA is a potential consequence, it is a complex process requiring a fresh case under Section 174 of the IPC, followed by a trial.

◈ Courts have emphasized that Section 50 does not grant ED the power to arrest a summoned person directly.

### Court Interpretations:

◈ The Delhi High Court clarified that ED's power to issue summonses (Section 50) does not inherently include the authority to arrest (Section 19).

◈ The court emphasized the distinctiveness of these provisions and highlighted that the apprehension of arrest does not justify resistance to summons.

◈ In navigating the complexities of ED summonses, legal interpretations, and potential consequences, the Kejriwal and Soren cases shed light on the delicate balance between investigative powers and individual rights, prompting a closer examination of legal frameworks and due process.

## DIGIYATRA INITIATIVE FACES CONTROVERSY AS AIRPORT STAFF ENROLL PASSENGERS WITHOUT CONSENT

**Context:** **The DigiYatra initiative, aimed at digitizing and streamlining passenger processing at airports through facial recognition, has come under scrutiny as reports reveal instances of passengers being enrolled without their knowledge or consent.**

### Background:

◈ The DigiYatra initiative **promotes paperless and seamless travel through airports**.

◈ The process involves **passengers scanning their boarding passes and faces at the entry point**, creating a biometric face token for subsequent checkpoints.

◈ However, recent incidents indicate that **private airport staff and security personnel are actively enrolling passengers without obtaining informed consent**.

◈ This controversial practice, observed at various Indian airports, has raised concerns about privacy infringement and data security.

### About DigiYatra:

◈ The **DigiYatra Foundation, a not-for-profit entity** with shareholders including the Airports Authority of India and private airports, aims to enhance operational efficiency and security.

◈ By enabling passengers to **navigate checkpoints effortlessly**, the initiative seeks to reduce congestion, lower operational costs, and improve security standards.

◈ Initially launched at **three airports in December 2022**, the DigiYatra initiative has expanded to 11 airports, with plans for further expansion to 14 more in the coming months.

◈ The **project receives funding from the airports** rather than the government.

### Recent Controversy :

◈ Instances where airport staff collected facial biometrics **without explicit consent**.

◈ The Central Industrial Security Force **(CISF) denies involvement**, leading to contradictory statements from airport officials.

◈ Concerns about **data security and privacy violations** persist, especially in light of past large-scale data breaches in India.

## SWACHH SURVEKSHAN AWARDS 2023

**Context:** **Hyderabad is selected as a five-star rating city in an open garbage free city category in SwachhSurvekshan and Water Plus recertification for 2023.**

### About the SwachhSurvekshan Awards 2023

◈ SwachhSurvekshanAwards 2023, A flagship initiative by the Ministry of Housing and Urban Affairs (MoHUA) in 2016.

◈ **A competitive framework:** It has evolved into the world's largest urban sanitation survey.

◈ **The primary aim :** Primarily it is focused on large scale citizen participation and create awareness amongst all sections of society, it is governed through the theSwachh Bharat Mission (Urban).

◈ **Important Themes/Indicator** : Phased reduction of plastic, effective processing of plastic waste, promotion of waste-to-wonder parks, and the organization of zero-waste events,

◈ **Waste Management** :It includes source segregation of waste, increasing cities' waste processing capacity to match generation, and reducing waste sent to dumpsites.

◈ The ranking of wards within cities is now integral to the survey. Furthermore, the assessment will consider specific indicators related to issues like 'Open Urination' (Yellow Spots) and 'Open Spitting' (Red Spots) faced by cities.

## PRIMARY AGRICULTURAL CREDIT SOCIETIES (PACS) AS NEW JAN AUSHADHIKENDRAS

**Context:** **The Indian government has recently creating the establishment of Pradhan Mantri Bhartiya Jan Aushadhi Kendras by inclusion of Primary Agricultural Credit Societies (PACS) nationwide.**

### Generic drugs

● **Definition** It refers the affordable versions of branded/patented drugs introduced to the market once the original drug manufacturer's patent expires.

● **Utility :** These medicines possess identical potency, quality, and effects, functioning in the same manner as their branded counterparts. Generic drugs are marketed by either their salt or brand name.

### Pradhan Mantri Bhartiya Jan Aushadhi Kendras

◈ **Governing Law/Act :**It isestablished under the PradhanMantriBhartiyaJanaushadhiPariyojana, launched by the Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers in November 2008.

◈ **Objective**: Providing quality medicines at affordable prices, especially for the economically disadvantaged, to minimize healthcare-related out-of-pocket expenses.

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◈ **Key Mechanism** : AushadhiKendras offer generic drugs, maintaining equivalent quality and efficacy to expensive branded drugs but at lower prices.

◈ **The Pharmaceutical & Medical Devices Bureau of India (PMBI),** established under the **Department of Pharmaceuticals, Government of India, collaborates with** CPSUs to coordinate the procurement, supply, and marketing of generic drugs through the PMBKs.

◈ **Government as Facilitator :** An incentive amount **of Rs.5 lakh is** provided for establishing a PradhanMantriBhartiya Jan Aushadhi Kendra.

## NURTURING INNOVATION: NATIONAL DEEP TECH STARTUP POLICY

**Context:** In pursuit of fostering innovation and technological advancement, the Principal Scientific Adviser to the Government the draft National Deep Tech Startup Policy (NDTSP) will be put for Cabinet Approval soon.

### Background:

◈ The term **'Deep Tech' refers to advanced and sophisticated technologies** that have a significant impact on various industries.

◈ These technologies, **including AI, robotics, nanotechnology, quantum computing, biotechnology, and renewable energy solutions**, are characterized by their complexity, innovation-driven nature, and the need for interdisciplinary collaboration.

### Need for National Deep Tech Startup Policy (NDTSP):

◈ The draft policy addresses the **challenges in funding** deep tech startups, highlighting that unlike startups in fintech or retail software, deep tech startups require significantly larger funding.

◈ **Global Advocacy and Trade Policy Alignment**

◈ The NDTSP advocates a coordinated, comprehensive **strategy to engage with international partners and multilateral institutions** to foster a supportive global environment for India's deep tech ecosystem.

### Current Landscape

◈ The draft policy addresses the **lack of a precise definition for 'deep tech' by emphasizing its complexity and reliance** on new scientific breakthroughs.

◈ It **distinguishes deep tech startups from others** by focusing on those that have developed intellectual property promising substantial impact, based on novel scientific advancements.

◈ The policy refers to Startup India's database, revealing that out of 10,298 recognized startups, only around **10% fall under the 'deep tech' category.**

◈ This indicates the need for concerted efforts to **boost the presence and impact** of deep tech startups in India.

### Objectives of NDTSP:

The NDTSP aims to secure India's position in the global deep tech value chain. It focuses on areas such as semiconductors, Artificial Intelligence (AI), and space tech. Key objectives include:

◈ **Focus on Fundamental and Technical Problems:** Prioritize support for deep tech startups addressing fundamental and technical challenges.

◈ **Financing Support**: Address critical financing needs during the pre-market phase when deep tech startups introduce their products or ideas.

◈ **Streamlined Intellectual Property Regime**: Simplify the intellectual property landscape to encourage innovation without undue complexities.

◈ **Ease of Regulatory Compliance**: Propose measures to ease regulatory requirements, creating a conducive environment for growth.

◈ **Commercialization Support**: Provide assistance and resources for the effective management and commercialization of technologies developed by deep tech startups.

### Measures to Promote Deep Tech Startups:

◈ **Export Promotion Board**: Establish an Export Promotion Board to facilitate entry into foreign markets for Indian deep tech startups.

◈ **Coordinated Oversight**: Create an "Inter-Ministerial Deep Tech Committee" to review and coordinate requirements effectively, streamlining the ecosystem.

◈ **International Collaboration and Market Access**: Promote strategic international collaborations to enhance market access for Indian deep tech startups globally.

◈ **Defense and Space Sector Focus**: Specifically target deep tech startups in defense and space sectors, aiming to enhance contributions to national security and space exploration.

### Attracting Global Talent and Expertise:

◈ **Networking Opportunities**: Provide networking opportunities to international deep-tech startups

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and experts interested in contributing to India's local ecosystem.

◈ **Resource-Intensive Approaches**: Emphasize resource-intensive measures to attract global talent, strengthening India's deep tech capabilities.

◈ **Visa and Immigration Facilitation**: Propose simplifying visa and immigration processes to attract foreign experts and investors.

## 'PRITHVI' INITIATIVE: A COMPREHENSIVE APPROACH TO EARTH SCIENCES RESEARCH

**Context:** The Union Cabinet, has granted approval for the 'PrithviVigyan' initiative, an integrated framework that consolidates five ongoing sub-schemes related to earth sciences.

### Aim:

◈ This initiative, with a budget of **Rs 4,797 crore over a five-year period (2021-26)**, aims to streamline and enhance the research efforts of the Ministry of Earth Sciences (MoES).



### Background:

The MoES currently manages various sub-schemes, including

◈ 'Atmosphere and Climate Research-Modelling Observing Systems and Services,'

◈ 'Ocean Services, Modelling Application, Resources and Technology,'

◈ 'Polar Science and Cryosphere Research,'

◈ 'Seismology and Geosciences,' and

◈ 'Research, Education, Training and Outreach.'

◈ The new 'PRITHVI' initiative will provide the **ministry with the flexibility to allocate funds** and pursue research projects seamlessly across these domains.

### Need for 'PRITHVI':

Integrated Earth System Sciences:

◈ The 'PRITHVI' initiative shifts the **focus from separate verticals such as atmosphere, cryosphere, geosphere, and ocean science to an integrated approach**.

◈ This allows for **cross-disciplinary projects and the combined utilization** of funds allocated for different verticals, fostering a holistic understanding of earth system sciences.

### Facilitating Ease of Research:

◈ The scheme aims to facilitate **ease of doing research** by providing a unified platform for integrated multi-disciplinary earth science research and innovative programs.

◈ This streamlining is expected to **enhance collaboration and coordination** among different MoES institutes.

### Objectives of 'PRITHVI':

The overarching 'PRITHVI' scheme aims to address grand challenges in various earth science domains:

◈ **Augmentation and sustenance of long-term observations** of the atmosphere, ocean, geosphere, cryosphere, and solid earth to monitor vital signs and changes in the earth system.

◈ Development of **modeling systems** for understanding and predicting weather, ocean, and climate hazards.

◈ Exploration of **polar and high seas regions** to discover new phenomena and resources.

◈ Development of technology for **exploration and sustainable harnessing of oceanic resources** for societal applications.

◈ Translation of knowledge and insights from **earth systems science into services for societal, environmental, and economic benefit**.

### Implementation and Collaboration:

◈ The integrated research and development efforts under 'PRITHVI' will involve collaborative endeavors

across different MoES institutes, including the **India Meteorological Department, National Centre for Medium Range Weather Forecasting, and others**.

◈ The ministry's **fleet of oceanographic and coastal research vessels** will provide essential support for research initiatives.

◈ By consolidating **sub-schemes and promoting cross-disciplinary projects, it aims to address critical challenges, contribute to scientific knowledge, and harness earth's resources sustainably**.

## CHINESE BOY 'CYBER KIDNAPPED' IN UTAH

**Context:** What is 'cyber kidnapping', and how does it work? What makes you more vulnerable to such crimes?

### Cyber Kidnapping Case:

◈ Chinese student, Kai Zhuang, found in rural Utah after reported missing on December 28.

◈ Parents paid $80,000 in ransom after being convinced of cyber kidnapping.

### Incident Details:

◈ Kai Zhuang, 17, reported missing, prompting involvement of Utah police.

◈ Parents back in China informed the host school in Utah about the apparent kidnapping.

### What is Cyber Kidnapping?

◈ Cyber kidnapping involves **convincing victims to hide and contacting loved ones** for ransom.

◈ Victims coerced to **send manipulated pictures**, creating an **illusion of captivity**.

◈ Virtual kidnappers monitor victims online through video-call platforms.



### FBI Definition and Characteristics:

◈ FBI defines virtual kidnapping as an **extortion scheme tricking victims** into paying ransom for a believed threatened loved one.

◈ Unlike traditional abductions, **virtual kidnappers haven'tphysically kidnapped anyone**.

◈ **Deceptions and threats** coerce victims to pay a quick ransom.

### Modus Operandi and Manipulation:

◈ Kai Zhuang manipulated since December 20, with parents sent pictures indicating his kidnapping.

◈ Cyber criminals use **video-call platforms** for surveillance.

### Rise of AI and Potential Threats:

◈ Experts highlight the **potential rise of cyber kidnapping** with the **advent of Artificial Intelligence (AI).**

◈ Scammers can use **AI to send voice notes mimicking loved ones in distress**.

### Testimonies and Rising Cases:

◈ Arizona woman's testimony in the US Senate about receiving a call mimicking her daughter's distress.

◈ No clear data on annual occurrences, but law enforcement experts note a rising trend.

### Global Instances:

◈ BBC report from July 2020 mentions **eight reported cyber kidnapping cases** in Australia targeting Chinese students.

### Protective Measures:

◈ Be cautious with calls from unknown numbers; **scammers can manipulate caller ID.**

◈ Carefully manage **personal informationshared on social media** to prevent **convincing calls.**

◈ Verify the **safety of loved ones** before **making ransom payments**; involve law enforcement.

◈ **Report incidents to the police** and seek professional assistance.

### Way Forward:

◈ Cyber kidnapping poses a growing threat globally.

◈ Vigilance, caution in sharing personal information, and immediate reporting crucial for prevention.

## ISRO'S ADITYA–L1 SUCCESSFULLY PLACED IN A HALO ORBIT AROUND L1 POINT

**Context:** India's maiden solar mission Aditya-L1 reached the L1 point, 127 days after it was launched. The point is located roughly 1.5 million km from earth and enables the spacecraft to view the sun continuously.

◈ **Introduction:** The Indian Space Research Organisation (ISRO) achieved a significant milestone as the Aditya-L1 spacecraft reached its destination, placing it in a halo orbit around the Lagrangian point (L1). This accomplishment comes 127 days after the spacecraft's launch on September 2, 2023.

### Chronology of Events:

### Launch of Aditya-L1 :

◈ Aditya-L1, India's **first solar mission**, was launched from the SatishDhawan Space Centre in Sriharikota.

◈ The **primary objective** was to study the sun, making it a **crucial mission for advancing solar observational capabilities.**

### Earth-Bound Manoeuvres:

◈ ISRO's **Telemetry Tracking and Command Network (ISTRAC)** executed four earth-bound manoeuvres to set the spacecraft on its trajectory.

### Trans-Lagrangian 1 Insertion Manoeuvre:

◈ **Aditya-L1 underwent the Trans-Lagrangian 1** insertion manoeuvre, initiating its 110-day trajectory towards the Lagrangian point.

### Arrival at Lagrangian Point:

◈ After a 1.5-million km journey, the **spacecraft reached the Lagrangian point**.

◈ ISRO scientists and engineers at ISTRAC in Bengaluru conducted a firing manoeuvre to place Aditya-L1 in a precise halo orbit around L1.

### Halo Orbit Insertion:

◈ The halo orbit insertion process was successfully carried out, ensuring the spacecraft's precise placement around L1.

◈ ISRO Chairman S Somnath emphasized the critical nature of the manoeuvre for avoiding potential deviations.

### Prime Minister's Announcement (January 6, 2024):

◈ Prime Minister NarendraModi announced the successful arrival of Aditya-L1 at its destination, praising the dedication of Indian scientists.

### Details of Halo Orbit and Lagrangian Point:

◈ **Halo Orbit Characteristics:**

➤ The **Aditya-L1 is in a periodic halo orbit** approximately 1.5 million km from Earth, maintaining a continuously moving Sun-Earth line.

➤ This **three-dimensional orbit involves the Sun, Earth, and the spacecraft**, ensuring unobstructed views of the Sun.

◈ **Lagrangian Point (L1):**

➤ **L1 is situated between the Sun and Earth**, about **1% of the Earth-Sun distance**.

➤ **Satellites placed at L1 experience** reduced fuel consumption, making it an advantageous position for observational spacecraft.

### Significance of Aditya-L1 Mission:

◈ Aditya-L1 is the first Indian space-based observatory dedicated to studying the Sun.

◈ The satellite carries seven payloads to observe the **photosphere**, **chromosphere,** and the **outermost layer of the Sun (corona)** using electromagnetic and particle detectors.
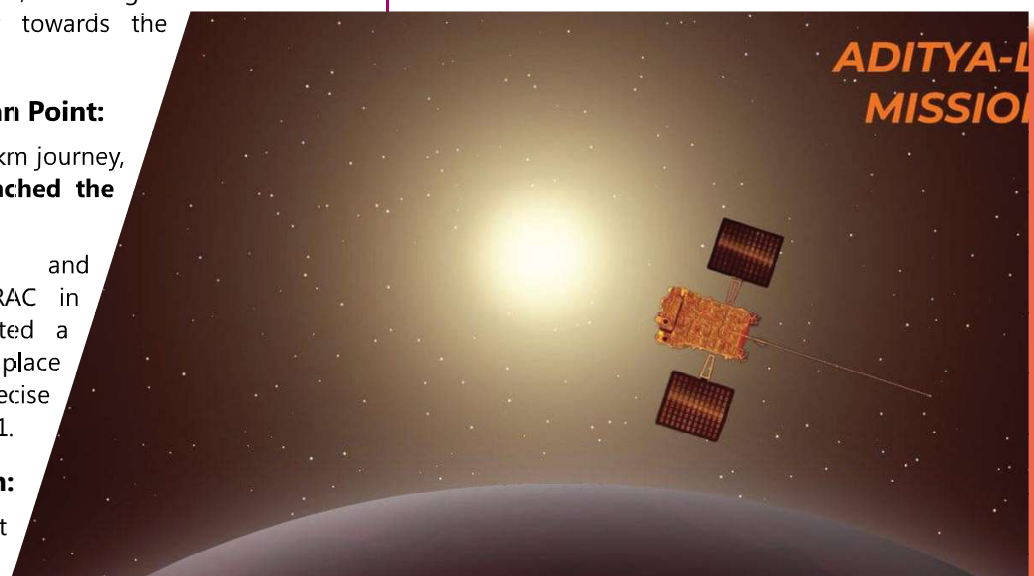


**ADITYA-L MISSIO**

**ISRO's Success in Complex Orbital Manoeuvres:**

◈ The precision in placing Aditya-L1 in the halo orbit highlights ISRO's capabilities in executing complex orbital manoeuvres.

◈ Confidence in handling such intricate missions **sets the stage for future interplanetary missions.**

**Way Forward:**

◈ The successful placement of Aditya-L1 in the halo orbit around L1 marks a **significant achievement for India's space exploration**endeavors.

◈ This mission holds the promise of **advancing our understanding of solar activities** and **contributing crucial data** to space science.'

## UAV 'DRISHTI 10 STARLINER'

**Context:** **Indian Navy Chief Admiral R Hari Kumar unveiled the first indigenously manufactured Drishti 10 Starliner Unmanned Aerial Vehicle (UAV).**

**Specifications -**

◈ It is the first indigenously manufactured Drishti 10 Starliner Unmanned Aerial Vehicle (UAV)

◈ UAV would play a pivotal role in shaping future naval operations and safeguarding India's national maritime interests in the Indian Ocean region.

◈ It has an impressive 36 hours of endurance and a substantial 450 kg payload capacity. It is an advanced intelligence, surveillance, and reconnaissance (ISR) platform.

◈ It stands out as the only all-weather military platform certified with NATOs STANAG 4671 (standardized agreement 4671) for airworthiness, allowing it to operate in both segregated and unsegregated airspace.

◈ Equipped with state-of-the-art sensors, enhanced endurance, advanced communication capabilities, and cutting-edge technologies.

◈ The UAV would play a pivotal role in shaping future naval operations and safeguarding India's national maritime interests in the Indian Ocean region.

## NATIONAL BIRDS DAY

**Context:** **Indian urban spaces are home to various birds; but some are vanishing at an alarming rate. Documentation such as this one brings hope and highlight the need for their conservation.**



**National Birds Day**

◈ January 5 observed as National Birds Day to raise awareness for bird conservation.

◈ Union Cabinet Minister emphasizes the importance of saving wetlands.

*Wetlands as Bird Sanctuaries:*

◈ Wetlands crucial for various bird species migrating to winter in India.

◈ Sustain ecosystems vital for local avian populations.

*Urban Bird Watching in India:*

◈ Indian cities teeming with wildlife, diverse bird species documented by enthusiasts.

◈ Despite dwindling numbers, bird sightings in urban areas remain popular.

**Exploring India's Feathered Residents: Columns by Gargi Mishra**

*1. The Jungle Babbler:*

◈ Known as the most argumentative bird, adept at mimicking other species.

◈ Plays a crucial role in protecting crops by feeding on pests.

◈ Unique appearance and social behavior; prone to brood parasitism.

*2. Oriental Magpie-Robin:*

◈ Resident of the Indian subcontinent, avoids arid areas.

◈ Attractive features, distinctive calls, and behavior.

◈ Role in Hindu mythology; associated with Lord Shiva.

*3. Common Hoopoe:*

◈ Seasonal migration across the subcontinent.

◈ Unique appearance, foraging habits, and nesting behavior.

◈ Defense mechanisms including foul-smelling liquid for protection.

### 4. Indian Roller (Tiha):

❖ Considered a harbinger of happiness; declared state bird in some states.

❖ Brilliant coloration during flight; associated with Hindu mythology.

❖ Feeds on agricultural pests; faced challenges from plume trade.

### 5. Indian White-Eye:

❖ Recognized by the distinctive white ring around its eyes.

❖ Importance as pollinators; sociable and migratory in local areas.

❖ Nesting habits and potential threats from habitat degradation.

### 6. Brown-Headed Barbet:

❖ Loud calls and distinctive appearance; family named after barb-like whiskers.

❖ Seasonal migration, nesting in urban spaces, and territorial behavior.

❖ Diet, habitat threats, and conservation challenges.

### 7. House Sparrows:

❖ Coexistence with humans since the Stone Age.

❖ Adaptations, omnivorous diet, and ability to live in various climates.

❖ Declining numbers due to predation, human activities, and Sparrow pie.

### Way Forward:

❖ Emphasis on the need for conservation efforts and creating safe spaces for birds.

❖ Author's personal experiences and observations shared to foster awareness.

❖ All photographs provided by the author, an amateur ornithologist.

## EXPERT PANEL SUGGESTS REFORM TO THE CASHEW CULTIVATION

**Context:** To uplift the livelihood of casher farmers and increase the export and domestic needs, government has formed the expert panel from different domain such as from cashew development Board, state planning board, center for social and environment studies.



### Key Recommendations:

❖ **Technology driven Production**: Mechanization and use of Modern Technology .

❖ **Avoid the Processing loss**: Implement the changes in phased inner and modify the changes to the processing methods if required.

❖ **Facilitation by existing government resources**: Cultivate the cashew on the government lands

❖ **Inclusive Growth :**utilization of the GI Tag(selling: Kerala Kollam cashew)

❖ *ICAR recommendations for Cashew Productivity*: use of nut shell machine and other related Technology, use Bordeaux paste to avoid fungal infection

### A geographical indication (GI)

● It is a label used on products indicating their specific origin, often associated with a particular location such as MithilaMakhana.

● It assures consumers of the product's quality and distinctiveness, such as in the case of Basmati Rice.

● The initial registration period for a geographical indication is 10 years, and it can be renewedfor additional 10-year periods.

### Who can establish a Jan Aushadhi Kendra?

● Eligible entities include state Governments -

  ➤ reputed NGOs

  ➤ private hospitals, charitable institutions

  ➤ doctors

  ➤ unemployed pharmacists

  ➤ individual entrepreneurs.

● Applicants must employ a B Pharma / D Pharma degree holder as a pharmacist in their proposed store.

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# Section D [QUIK BYTES]

- Two villages on LOC get electricity for the first time
- Karnapex 2024
- Digital tools set to save Kashmiri script
- WHO lanuches ICD-11, Traditional Medicine Module 2
- Warm vaccine
- Lakshadweep
- Kepulauan Talaud

## Two villages on LOC get electricity for the first time



**Kundiyan and Patroo** – two remote villages in North Kashmir's Kupwara district, **along the Line of Control** have got electricity for the first time.

- They have now been connected to the grid by the Two sub-stations of 250 KV were completed under the **SamirdhSeemaYojana** by the KPDCL Electric Division Kupwara to electrify the villages.

### SamirdhSeemaYojana

- SSY scheme was launched in 2022-23 in the Union Territory of Jammu and Kashmir as a special initiative with an allocation of Rs 50 crore for inclusive development of border areas, in convergence with other schemes, especially in the seven Thematic Areas

- Including Roads and Buildings, Health, Education, Agriculture, Power, Drinking Water Supply, Social Sector and Sports Infrastructures. The aim is to ensure the provision of essential infrastructure facilities and opportunities for sustainable living which would help integrate these areas with the mainstream by providing basic facilities

## Karnapex 2024



The 13th state-level philatelic exhibition, Karnapex 2024 -Festival of Stamps.

### About-

- Stamps dating back to 1832 and a half-anna piece in red, was the oldest on display.

- Collection of postage stamps is philately. The Government launches stamps commemorating special events like centenary birth anniversaries of great leaders, achievements of schemes, sports persons, honouring military officials and their sacrifices, promoting tourist spots and heritages, etc.

- Stamps are reflections of the heritage and achievements of a country. **National Philately Day** is celebrated on October 13 to encourage philately as a hobby.

- India Post organised AMRITPEX 2023 in New Delhi. It was a National Philatelic Exhibition.

## Digital tools set to save Kashmiri script



**Microsoft India's MS Translator software has now included the Kashmiri language.**
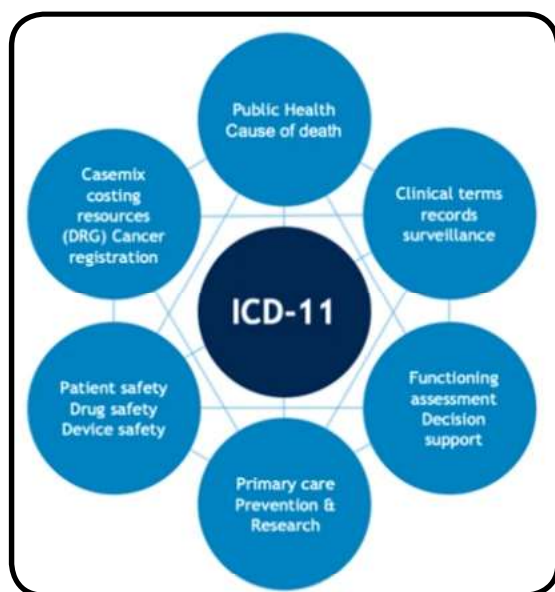
### About –

- The Kashmiri language has survived only through oral traditions; by 2013, those who could write the script fell to just 5%.

- These moves are likely to benefit 70 lakh Kashmiri speakers living in the erstwhile State of Jammu and Kashmir, including those in Pakistan Occupied Kashmir (PoK).

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- Kashmiri — which is influenced significantly by Sanskrit, Persian, and Arabic — had fallen into the category of endangered languages.

**Kashmiri Language**

- Is a Dardic language of Indo-Aryan language family spoken by around 7 million Kashmiris of the Kashmir region (majority in Kashmir Valley) primarily in the Indian-Administrated union territory of Jammu and Kashmir.
- Kashmiri has split ergativity and the unusual verb-second word order.
- Since 2020, it has been made an official language of Jammu and Kashmir along with Dogri, Hindi, Urdu and English. Kashmiri is also among the 22 scheduled languages of India.

## WHO lanuches ICD-11, Traditional Medicine Module 2

The data and terminology relating to diseases based on Ayurveda, Siddha and Unani Medicine have been included in the WHO ICD-11 classification.

**About ICD-11 Classification-**

- ICD serves a broad range of uses globally and provides critical knowledge on the extent, causes and consequences of human disease and death worldwide via data that is reported and coded with the ICD.
- Clinical terms coded with ICD are the main basis for health recording and statistics on disease in primary, secondary and tertiary care, as well as on cause of death certificates.
- The International Classification of Diseases (ICD) has been the basis for comparable statistics on causes of mortality and morbidity between places and over time.

**About ASU:**

- Ayurveda, Siddha and Unani drugs, which are mainly poly-herbal/herbo-mineral preparations, are very different from synthetic molecules of the allopathic system which are produced under controlled laboratory conditions.
- It depends on the quality and availability of raw materials of botanical origin.
- Keeping this in view, the National Medicinal Plants Board (NMPB) was established in the year 2000 with the objective of in-situ conservation and ex-situ cultivation of quality medicinal plant raw materials.
- In view of environmental pollution the NMPB is examining how best to adopt Good Agricultural and Collection Practices for collection and cultivation of medicinal plants for ensuring quality raw material for ASU medicines.
- As a large number of our forest dwellers and small landholders are engaged in collection and cultivation, these norms have to be adopted in a way that livelihood is not affected.
- Both traditional and modern parameters are used for quality testing and standardization of raw materials as well as finished products.

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## Warm vaccine



IISc Bengaluru comes up with warm vaccine against current strains of SARS-CoV-2.

### About the warm vaccine –

- It is a vaccine that can maintain its chemical structure even in room temperature. This will help to manage the logistical challenge.

### Vaccine Candidate by IISc Bengaluru –

- It is effective against all current strains of SARS-CoV-2 and can be quickly adapted for future variants as well.

## LOCATION IN NEWS

## Lakshadweep



- PM Modi was in Lakshadweep to inaugurate the Kochi-Lakshadweep Islands Submarine Optical Fiber Connection and lay foundation stone for the renovation of primary healthcare facility and five model Anganwadi centres.
- In addition to creating futuristic infrastructure, it is also about creating opportunities for better healthcare, faster internet and drinking water, while protecting as well celebrating the vibrant local culture.
- The islands of Agatti, Bangaram and Kavaratti were visited.
- **Location:** Lakshadweep is a group of islands located in the Laccadive Sea, which is part of the northeastern part of the Arabian Sea.
- Latitude and Longitude: The approximate geographical coordinates of the Lakshadweep Islands are between 8° and 12° N latitude and 71° and 74° E longitude.
- Distance from the Indian Mainland: The islands are situated about 200 to 400 kilometers off the southwestern coast of India. The closest mainland state is Kerala.
- Neighboring Regions: Lakshadweep is to the northwest of the Maldives and is the northern extension of the Maldives archipelago.
- Total Area: The total land area of all the islands combined is relatively small, covering about 32 square kilometers.
- Coral Atolls: The islands are coral atolls, meaning they are formed from coral reefs surrounding a lagoon. The atolls are made up of coral and other organic material.
- Island Distribution: The Lakshadweep archipelago is composed of 36 islands and islets, and they are grouped into three main geographical units: Amindivi Islands, Laccadive Islands, and the uninhabited Pitti Bank.
- The geographical location of Lakshadweep contributes to its unique ecosystem, characterized by coral reefs, marine life, and tropical climate.
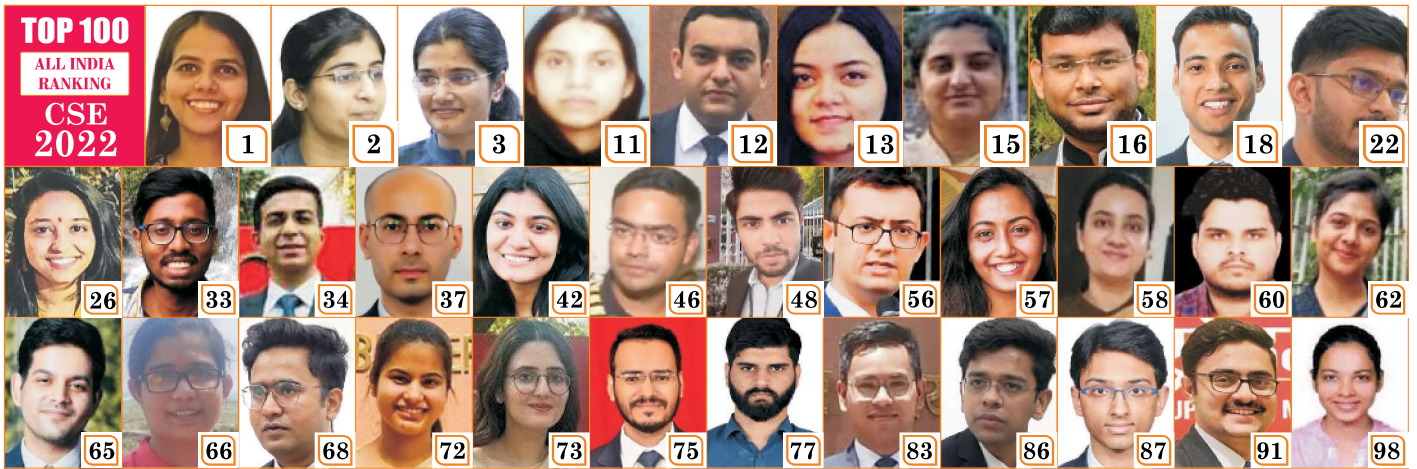
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## Kepulauan Talaud

An earthquake of magnitude 6.8 struck Indonesia's Kepulauan Talaud.

**About Kepulauan Talaud –**

- **Talaud Islands**, island group of northern Indonesia, situated about 225 miles (360 km) **northeast of Celebes (Sulawesi).**

- The Talaud Islands form an **archipelago** situated to the north-east of the Minahasa Peninsula.

- Along with the Sangihe Islands to the west and south, the Talaud Islands are **administered from Manado**, the capital of North Sulawesi provinsi (province).

- The region is regularly rocked by large earthquakes and volcanic eruptions, as the **Molucca Sea Plate is being consumed** in both directions.

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