PRAYAAS
INSTITUTE OF EXCELLENCE

MONTHLY CURRENT AFFAIRS CAPSULE (UPSC)

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PRAYAAS UPSC
+91-9894998421
Ramashree, CTC No, 279, NC Kelkar Road, Narayan Peth Pune.

PREFACE

Hello PRAYAAS' Students Community,

Fear of current affairs among UPSC students is justified due to the vastness of the current affairs, the dynamic nature of current events, the unpredictability of the exam, the need for a deep understanding, and the pressure to stay updated.

From above, we recognize that the UPSC examination demands a thorough understanding of current affairs and their implications on a broader scale. **Therefore, "PRAYAAS PRABHAV" is not merely a compilation of news headlines but a gateway to a deeper comprehension of the interconnected world we live in.**

Each article in this magazine is designed to foster critical thinking and analytical skills, essential for excelling in the UPSC examinations and becoming an astute civil servant.

As you delve into the pages of this magazine, *we encourage you to engage actively with the content, ponder over the implications, and form your independent viewpoints.*

At the end of Magazine, you will get **QR Code of weekly lectures by our faculty (Dhananjay Sir)**. These lectures are available **Free of Cost** to all Sincere Aspirants. In that lectures you will thoroughly understand each topic of these Monthly Compilation. Make Most use of it to understand topic better.

Till, December, we are Specifically focusing on Mains perspective. Mains focus will be on how to develop that thinking abilities and how to decipher topics for mains.

Start from January till prelims, we will shift our focus specifically on Prelims Perspective here our special focus on linking Current with Static.

The UPSC examinations not only assess your factual knowledge but also value your ability to analyse, synthesize, and present coherent arguments. **Let "PRAYAAS PRABHAV" be your ally in honing these essential skills.**

We are hopeful that this efforts from PRAYAAS will bring more clarity in Your UPSC Journey. *As in the name of our institute "PRAYAAS Institute of Excellence", it will bring excellence in your current affairs and over all journey of UPSC.*

Your Thankful,

Team PRAYAAS

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GS 2

Education in Multilingualism

Why in the News?

- With three-language formula of the National Education Policy (NEP 2020), there is continuous talk about multilingualism and Education.

Introduction: -

- Multilingualism is the ability to speak, understand, read, and write more than one language. It can be individual or societal, depending on whether a person or a community uses multiple languages.
- It is also a key aspect of human development and identity. However, in a *diverse and multilingual country like India*, language can also pose significant challenges for education.

Importance of Multilingualism in Education: -

Enhancing Cognitive Development:

- Research shows that learning more than one language can boost brain functions, such as memory, attention, problem-solving, and creativity.

Fostering Cultural Diversity:

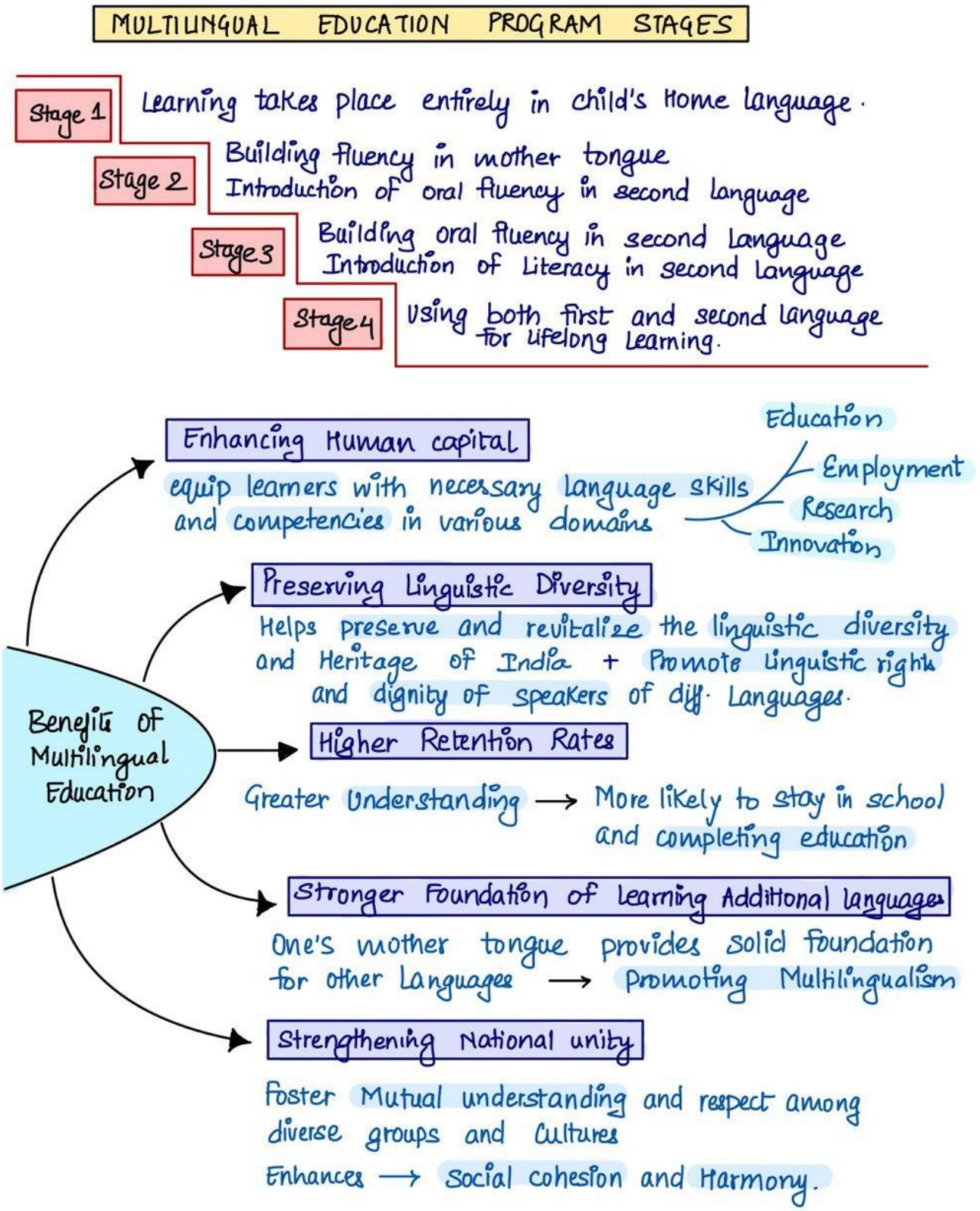
- Learning multiple languages can expose students to different cultures, perspectives, and values. It can also help them develop **intercultural competence,** which is the ability to communicate effectively and appropriately with people from diverse backgrounds.

Improving Academic Achievement:

- Studies have consistently shown that students who receive instruction in their mother tongue or home language perform better in school than those who are taught in a foreign or unfamiliar language.

Promoting Social Inclusion:

- Providing education in multiple languages can ensure that every child has equal access and opportunity to learn, regardless of their linguistic background.


MULTILINGUAL EDUCATION PROGRAM STAGES
Stage 1
Learning takes place entirely in child's Home language.
Stage 2
Building fluency in mother tongue
Introduction of oral fluency in second language
Stage 3
Building oral fluency in second Language
Introduction of Literacy in second language
Stage 4
Using both first and second language for lifelong learning.
Benefits of Multilingual Education
Enhancing Human capital
equip learners with necessary language skills and competencies in various domains
Education
Employment
Research
Innovation
Preserving Linguistic Diversity
Helps preserve and revitalize the linguistic diversity and Heritage of India + Promote linguistic rights and dignity of speakers of diff. Languages.
Higher Retention Rates
Greater Understanding → More likely to stay in school and completing education
Stronger Foundation of learning Additional languages
One's mother tongue provides solid foundation for other Languages → promoting Multilingualism
Strengthening National unity
Foster Mutual understanding and respect among diverse groups and Cultures
Enhances → Social cohesion and Harmony.

CHALLENGES OF MULTILINGUALISM IN EDUCATION

1 Lack of Resources

- Trained teachers
- Appropriate curricula
- Quality textbooks
- Digital platforms

↓

Schools in **rural** and **remote areas** lack such resources

2 Lack of Policy support

NEP 2020 and **NIPUN BHARAT MISSION** advocate for Multilingual education

POLICY ⟷ GAP IN ⟷ PRACTISE

Need for → Coordination & Collaboration among different stakeholders

- Central Govt
- State Govt
- Civil Society
- Communities

3 Lack of Awarness

Parents, teachers, students and policymakers – Not aware of benefits

Many **Misconceptions** or **prejudices** → prefer English as the medium of instruction → Believing that it will provide Better opportunities

4 Assessment and Evaluation

Developing fair and **standardized assessment** methods across different languages → difficult.

Evaluation → challengening using multiple languages.

5 Curriculum Alignment

Balancing use of mother tongue with national or standardized curricula can be challenging

6 Transition to Higher Education and Employment

Multilingual education → effective in Primary level

↓

Higher proficiency in more widely spoken language is required in transitioning to Job Market → disadvantage to students studied in mother tongue.

Policy Recommendations for Multilingualism in Education: -

Adopting a Flexible and Inclusive Approach:

- Multilingual education should be tailored to the needs and contexts of different learners and communities.

Strengthening Teacher Capacity:

- Teachers play a crucial role in delivering multilingual education.
- They should be provided with adequate training and support to teach effectively in multiple languages.

Engaging Parents and Communities:

- Parents and communities are key partners in promoting multilingual education.
- They should be informed about the benefits of multilingualism for their children's development and learning.

Creating a Culture of Multilingualism:

- Multilingualism should be celebrated as a valuable asset for India's social and economic development.

Conclusion:

- India needs to adopt LEAP - Language Empowerment for Achieving Potential.
- By supporting multilingualism and providing sufficient training and resources to teachers, *LEAP will help enhance linguistic skills, improve cognitive development, and create a more culturally diverse and intellectually enriching educational environment.*

Question for Practice: -

- Discuss the benefits and challenges of multilingualism in education in India. Suggest some policy recommendations and innovative models for promoting multilingual education in India.(250W)

Caste Based Violence in India

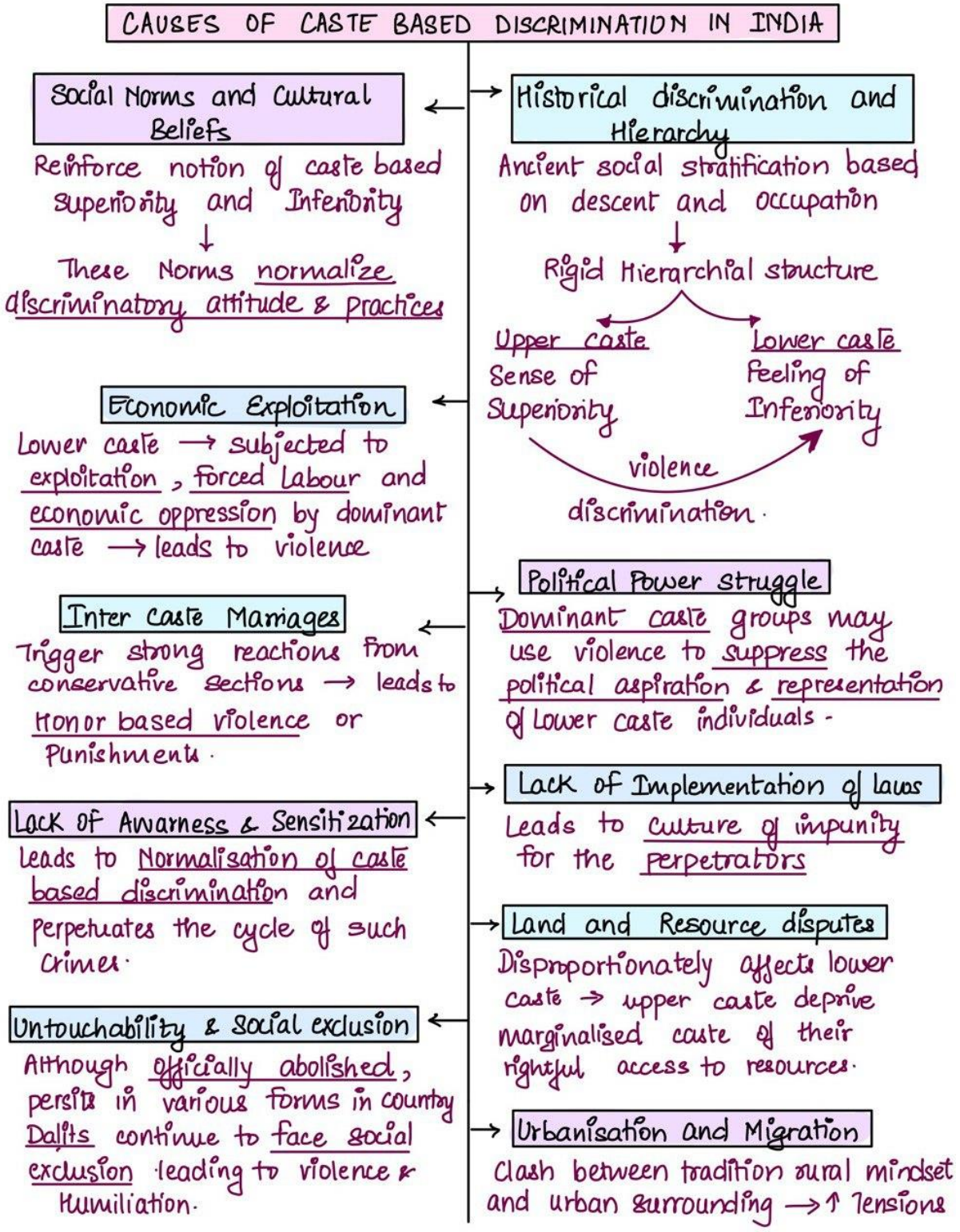
Why in News?

- Death of a 15-year-Dalit boy, who was allegedly beaten by a teacher from his school in Uttar Pradesh', has sparked massive protests.
- Nine-year-old Dalit boy, who died after allegedly being beaten by a schoolteacher, was thrashed because he touched a water pot used by upper-caste people.

Data: -

- As per the statistics **provided in the NCRB report**, atrocities/Crime against Scheduled Castes have **increased by 1.2% in 2021.**
- Uttar Pradesh (13,146 cases) reported the highest number of cases of atrocities against Scheduled Castes (SCs) accounting for 25.82% followed by Rajasthan with 14.7% (7,524) and Madhya Pradesh with 14.1% (7,214) during 2021.
- Furthermore, as per the report, Atrocities/Crime against Scheduled Tribes have increased by 6.4% in 2021 (8,802 cases) over 2020 (8,272 cases).
- Madhya Pradesh (2627, cases) reported the highest number of cases of atrocities against Scheduled Tribes (STs) accounting for 29.8% followed by Rajasthan with 24% (2121 cases)

Causes of Caste-Based Crimes in India:



Implications of Caste-Based Crimes:

Social Fragmentation:

- Caste-based crimes deepen divisions within society, leading to mistrust and animosity between different caste groups.
- These divisions hinder social cohesion, which is crucial for the overall development of the nation.

Human Rights Violations:

- Caste-based crimes often involve violence, physical abuse, and even killings.
- Such incidents constitute grave human rights violations, denying individuals their right to life, dignity, and equality.

Undermining Rule of Law:

- Failure to address and prevent caste-based crimes undermines the rule of law and erodes public trust in the justice system.
- This can lead to vigilantism and social disorder.

Economic Consequences:

- Victims of caste-based crimes often belong to marginalized communities that already face economic hardships.
- Violence can further marginalize them, impeding their access to education, employment, and economic opportunities.

Psychological Impact:

- Caste-based crimes create a sense of fear, vulnerability, and psychological trauma among the targeted communities.
- The constant threat of violence affects the mental well-being of individuals and communities.

Obstacles to Development and Empowerment:

- Caste-based violence hinders the development and empowerment of marginalized communities.
- It limits their access to education, healthcare, and economic opportunities, preventing them from realizing their full potential.

Weakening Democracy:

- Caste-based crimes undermine the principles of equality and democracy by perpetuating inequalities and limiting equal participation in public affairs.

Ethical Concerns:

- These crimes raise ethical concerns, challenging the moral fabric of a society that claims to value human rights and equality.

International Reputation:

- The persistence of caste-based violence negatively impacts India's international reputation as a democratic and progressive nation.
- It raises concerns among the global community about the prevalence of discrimination and violence based on caste identities.

Safeguards Provided against Caste Based Discrimination: -

Constitutional Provisions:

- **Article 15:** The State shall not discriminate against any citizen on the basis of religion, race, caste, sex, place of birth or any of them.
- **Article 16:** No citizen shall be disqualified for any office under the State on the basis of religion, race, caste, sex, descent, place of birth or any of them.
- **Article 335:** Provides that the claims of the members of the SCs/STs shall be taken into account, along with the maintenance of efficiency of administration, in the making of appointments to services and posts in connection with the affairs of the Union or of a State.
- **Article 330 and Article 332:** Reservation of seats for SCs/STs in the Lok Sabha and State legislative assemblies.

Constitutional Bodies:

- National Commission for Scheduled Castes.
- National Commission for Scheduled Tribes.

Statutory Provision:

- Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Amendment Act, 2018.

Possible Solutions to Prevent and Redress Caste-Based Crimes in India: -

Strengthening Legal Framework:

- Enforce strict implementation of laws such as the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act to ensure effective deterrence and punishment for caste-based crimes.
- Enhance penalties for perpetrators of such crimes, ensuring they are proportionate to the severity of the offense.

Fast-Track Courts:

- Establish fast-track courts specifically dedicated to handling cases of caste-based crimes.
- This can expedite the legal process, provide timely justice, and discourage perpetrators from using delay tactics.

Sensitization of Law Enforcement:

- Conduct regular training and sensitization programs for law enforcement personnel to ensure they handle cases of caste-based crimes with empathy and fairness.
- Foster a more victim-centric approach in investigations.

Community Awareness and Education:

- Promote awareness campaigns at the grassroots level to educate communities about the detrimental effects of caste-based discrimination and crimes.
- Encourage discussions on social equality and human rights within families, schools, and local institutions.

Empowerment through Education:

- Ensure equitable access to quality education for marginalized communities, enabling them to challenge stereotypes and pursue socio-economic advancement.
- Scholarships and incentives can be provided to encourage higher education among these groups.

Social Integration Programs:

- Implement programs that facilitate interactions and cooperation between different castes, fostering understanding and empathy among communities.
- Cultural events, sports, and skill development initiatives can bridge gaps.

Political Accountability:

- Hold political representatives accountable for promoting unity and not exacerbating caste divisions for electoral gain.
- Encourage elected officials to prioritize policies that bridge gaps and uplift marginalized communities.

Counselling and Rehabilitation:

- Provide psychological counselling and support for victims of caste-based crimes to help them cope with trauma.

- Offer avenues for skill development and rehabilitation to enable victims to rebuild their lives.

Academic Research and Data Collection:

- Support research on caste-based crimes to understand their root causes and consequences.
- Collect accurate data on such crimes to inform policy decisions and measure progress.

Conclusion: -

- Deeply entrenched issue of caste-based crimes in India demands a concerted effort towards transformation. The multifaceted nature of this challenge necessitates a comprehensive approach that intertwines legal, societal, and educational measures.
- As we tread this path, it's crucial to recognize that the eradication of caste-based crimes transcends policy shifts. It's an assertion of our collective commitment to human dignity, social justice, and equality. With determination, collaboration, and unwavering dedication, we can ultimately steer India towards a future where caste-based crimes are relegated to history, and the nation flourishes as an exemplar of unity and progress.

Quotes: -

- The measure of a country's greatness should be based on how well it cares for its most vulnerable populations." - **Dalai Lama**
- "Injustice anywhere is a threat to justice everywhere." - **Martin Luther King Jr.**
- "No one is born hating another person because of the color of his skin, or his background, or his religion. People must learn to hate, and if they can learn to hate, they can be taught to love, for love comes more naturally to the human heart than its opposite." - **Nelson Mandela**

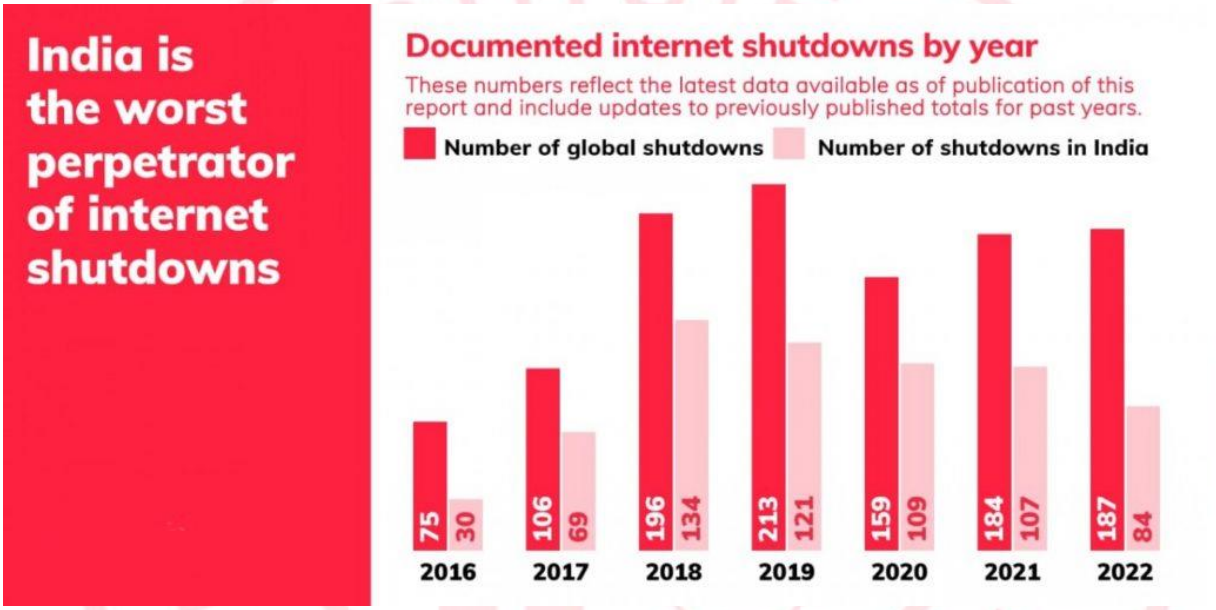
Question for Practice: -

- Our lives begin to end the day we become silent about things that matter." In this context, "Discuss the multifaceted challenges posed by caste-based violence in India, highlighting its underlying causes, societal implications, and potential solutions. (250W-15M)

Internet Shutdowns

Why in News?

- According to a report by Access Now and the KeepItOn coalition, India enforced as many as 84 internet shutdowns in 2022 and was on **top of the list for the fifth year in a row.**
- According to the Internet Shutdown Tracker, a portal maintained by Software Freedom Law Centre, a legal services organisation working in this field in India, there have been a total of 665 internet shutdowns in India since 2012, and over 50 per cent of these shutdowns were imposed since 2019.



Causes of Internet Shutdowns

Curbing Hate Speech and Fake News:

- Governments may order internet shutdowns to contain hate speech, rumours, and fake news that could incite violence or create social unrest

Law and Order Concerns:

- One of the primary reasons for internet shutdowns is to maintain law and order during periods of civil unrest, protests, or communal tensions.
- Authorities may impose shutdowns to prevent the spread of misinformation, curb the organization of protests, or control potential violence.

National Security:

- Internet shutdowns can be enforced in the name of national security to prevent terrorist activities, potential threats, or to maintain confidentiality during critical operations.

Public Safety Concerns:

- Shutdowns may be implemented during natural disasters or emergencies to manage communication channels and avoid spreading panic or misinformation.

Social Media Control:

- Shutting down specific social media platforms or apps may be aimed at controlling the spread of information during sensitive events or to address concerns related to privacy and security.

Controlling Content Circulation:

- Internet shutdowns can also be used to prevent the circulation of specific content, such as videos or images that are deemed harmful or objectionable.

Protests and Dissent:

- In some cases, internet shutdowns are imposed to stifle dissent and prevent the coordination of protests or opposition against the government.

Laws Governing Internet Shutdowns in India

Section 5(2) of the Indian Telegraph Act, 1885, read with Temporary Suspension of Telecom Services (Public Emergency and Public Safety) Rules, 2017:

- These rules allow the union or state home secretary to order the suspension of any telegraph service (including internet) in case of public emergency or public safety.
- Such an order must be reviewed by a committee within five days and cannot last for more than 15 days. In an urgent situation, an officer of joint secretary level or above, authorized by the union or state home secretary, can issue the order.

Section 144 of the Code of Criminal Procedure:

- This section empowers a district magistrate, a sub-divisional magistrate or any other executive magistrate specially empowered by the state government to issue orders to prevent or stop any nuisance or disturbance of public tranquillity.

- Such orders can include the suspension of internet services in a particular area for a specified period.

Section 69A of the Information Technology Act, 2000:

- This section empowers the central government to block access to any information on the internet that it considers to be prejudicial to the sovereignty, integrity, defence, security or friendly relations of India, or to public order or decency, or to incitement of any offence.
- However, this section **only applies to blocking specific websites** or content, not the entire internet.

Impacts of Internet Shutdowns: -

Economic Disruption:

- Internet shutdowns can paralyze online businesses, e-commerce, and digital payment systems.
- Interrupted online transactions and communication disrupt supply chains and economic activities.
- According **to one estimate by Top10VPN.com**, a UK-based digital privacy group, internet shutdowns **cost India over Rs 20,000 crore** ($2.8 billion) in 2020 alone.
    - Kashmir's Six-Month Communication Blockade in 2019:
      The communication blockade in Kashmir, which lasted for six months in 2019, resulted in over five lakh people losing their jobs. This prolonged internet shutdown severely disrupted businesses and economic activities in the region.

Impacts Freedom of Expression and Information:

- Internet shutdowns violate the right to free expression and information, which is guaranteed by Article 19(1)(a) of the Constitution of India and Article 19 of the Universal Declaration of Human Rights.
- They prevent people from sharing and accessing information, expressing opinions, participating in online civic spaces, and holding authorities accountable.

Social Isolation:

- People are cut off from their online social networks, impacting mental health and overall well-being.
- Lack of connectivity can lead to feelings of isolation during crises.

Impact on Tourism and Hospitality:

- Shutdowns deter tourists and impact bookings and reservations made online.
- This affects the revenue of tourism and hospitality industries.

Deepen Digital Divide:

- Internet shutdowns also deepen the digital divide between those who have access to reliable and affordable internet and those who do not.
- They disproportionately affect marginalised groups such as rural populations, women, minorities, low-income households, and people with disabilities.
- They also contradict the government's vision of a Digital India that aims to empower citizens through digital public infrastructure and services.

International Reputation:

- Frequent internet shutdowns can tarnish a country's international image.
- It signals instability and lack of respect for digital rights.

Arguments For Internet Shutdowns: -

Preventing Hate Speech and Fake News:

- The internet can be used to spread hatred and hostility against different religious and ethnic groups.
- Internet shutdowns can help to counter xenophobic tendencies and misinformation.

Maintaining Law and Order:

- Internet shutdowns can be used as a last resort by the authorities to deal with mass protests and civil unrest, by stopping the circulation of provocative messages and rumours that can incite violence and chaos.

Avoiding Anarchy:

- In some extreme situations where social media platforms become a source of disruption and confusion, it may become necessary to suspend internet services to restore calm and order.

Important Judgments Related to internet shutdowns in India: -

Anuradha Bhasin v Union of India (2020):

- In this landmark case,the Supreme Court delivered a significant judgment, recognizing that the **right to free speech and the right to carry out trade and business through the internet are fundamental rights protected under Article 19(1)(a) and Article 19(1)(g) of the Constitution of India**, respectively.

- The court also held that internet shutdowns are subject to constitutional scrutiny and must adhere to the principles of necessity and proportionality.
- The court emphasized that any restriction on internet access must be based on relevant material facts and be the least restrictive measure to achieve the objective sought.
- The judgment laid down guidelines to ensure that internet shutdowns are not imposed indefinitely, and any order suspending internet services must be published and subject to judicial review.
- The judgment provided a significant legal precedent and framework for evaluating the legality and constitutionality of internet shutdowns in India.

Foundation for Media Professionals v. Union Territory of Jammu and Kashmir (2020):

- In this case, the Supreme Court of India directed the Jammu and Kashmir administration to review all existing restrictions on internet access, stating that the right to internet access is a fundamental right and must be respected.

Way Forward: -

Exploring Substitutes to Shutdowns:

- In addressing challenges like law-and-order disruptions, communal conflicts, terrorist incidents, examinations, and political volatility, the government should contemplate employing alternative approaches that are less disruptive.
- These could include targeted restrictions on certain websites or content, issuing cautionary alerts or advisories, fostering collaboration with civil society and media, or bolstering the deployment of security forces.

Revamping the Legislative Structure:

- The government ought to revise or modify the Telegraph Act and its associated regulations, which are antiquated and ambiguous. These regulations do not align with constitutional and human rights norms, which stipulate that any curtailment of internet access must meet the criteria of being essential, lawful, commensurate, and temporary.

Respecting the Supreme Court Judgment:

- The authorities should follow the directions of the Supreme Court in Anuradha Bhasin case, which recognised the right to internet access as a fundamental right and laid down the principles of reasonableness and proportionality for any internet restriction.

Conclusion: -

- In the intricate tapestry of modern society, the impacts of internet shutdowns weave a disconcerting narrative, underscoring the delicate balance between security, progress, and individual freedoms.
- To quote **Martin Luther King Jr**., **"Our lives begin to end the day we become silent about things that matter." Internet shutdowns force an unwanted silence upon citizens, muffling their voices, stifling their expressions, and subduing their aspirations.**
- In the pursuit of national security and stability, the consequences of internet shutdowns must not be overlooked. In the spirit of global interconnectedness, societies must strive to strike a delicate equilibrium between safeguarding collective well-being and upholding the individual's right to access the boundless expanse of the virtual world.

Judicial Pendency

Why in the news?

- The **Ministry of Law and Justice** recently informed the Rajya Sabha that over **5.02 crore cases** were pending in various courts.
- The Bombay High Court is facing an acute shortage of judges as nearly 40 percent of the posts are vacant. There are 5.88 lakh cases pending before the Bombay High Court.

Syllabus of Mains – GS 2 – Structure, Organization and Functioning of the Executive and the Judiciary

Introduction: -

- Judiciary pendency refers to the backlog or accumulation of unresolved cases within a country's judicial system.
- It is a measure of the number of legal cases that have been filed and are awaiting resolution in the courts. These cases can include civil, criminal, administrative, and other types of legal matters.

Data on it: -

- **According to the National Judicial Data Grid (NJDG),** Over 5.02 crore cases are pending in courts across different levels of the judiciary.
- 21 judges for every million people whereas *Law Commission had recommended 50 Judges per million*
- 0.08-0.09% of the GDP is the budgetary allocation to the judiciary.
- **Regional Variations:** In many states, the number of pending cases is significantly higher than the national average.
    - Example: In Bihar, there are over 5 million pending cases, while in Uttar Pradesh, there are over 6 million pending cases.

Court	Pendency in 2019	Pendency in 2020	Pendency in 2021	Pendency in 2022
Supreme Court	59,535 (as on December 2019)	64,426 (as on December 2020)	69,855 (as on December 2021)	70,154 (as on March 2022)
High Courts	46,84,354 (as on December 2019)	56,42,567 (as on December 2020)	56,49,068 (as on December 2021)	58,90,726 (as on March 2022)
District & Subordinate Courts	3,22,96,224 (as on December 2019)	3,66,39,436 (as on December 2020)	4,05,79,062 (as on December 2020)	4,09,85,490 (as on March 2022)

- **Pendency in Tribunals and Special Courts:** Tribunals and special courts (such as Fast Track Courts and Family Courts), which were set up to ensure speedy disposal of cases, also witness high pendency and vacancies.
    - Example: at the end of 2020, 21,259 cases were pending before the National Company Law Tribunal (NCLT).

Reasons for the high pendency of cases in the Indian Judiciary: -

Insufficient Judges:

- The Indian judiciary faces a shortage of judges, causing delays in case resolutions due to a backlog of pending cases.

Inadequate Court Infrastructure:

- Many courts in India lack the essential infrastructure and resources required to handle the high caseload, leading to delays in case processing.

Complex Legal Matters:

- Some cases are intricate and demand extensive time and resources for resolution, contributing to delays.

Procedural Holdups:

- Delays often occur in legal proceedings due to procedural challenges, such as difficulties in locating witnesses or delays in obtaining evidence.

Weak Enforcement of Court Decisions:

- In certain instances, court orders are not effectively enforced, resulting in further delays in case resolutions.

Rising Legal Awareness:

- An increase in legal awareness has led to a surge in filed cases. Additionally, mechanisms like Public Interest Litigation (PIL) have contributed to a higher volume of legal disputes.

Frequent Adjournments:

- The laid down procedure of allowing a maximum of three adjournments per case is not followed in over 50 per cent of the matters being heard by courts, leading to rising pendency of cases.

Delayed investigation:

- Delay in processing both civil and criminal cases due to non-availability of counsel, misaligned incentives, the complexity of facts involved, nature of evidence etc. leads to rising judicial pendency.

Impact on the justice delivery system in India: -

Delays in the administration of justice:

- A large backlog of cases waiting to be heard can result in delays in the resolution of cases, which can take many years or even decades.

Negative impact on justice quality:

- Judges may not have the time or resources to fully consider the merits of each case due to paucity of time. This can lead to decisions that are not fully informed or that do not adequately address the issues at hand.

Burden on the court system:

- A large number of pending cases can burden the court system, making it difficult for judges to hear and decide cases in a timely manner.

Loss of faith in the legal system:

- Long delays can lead to a loss of faith in the legal system among the public.

Financial burden on litigants:

- Prolonged litigation can be costly for litigants, as they have to bear the expenses of prolonged court proceedings.

Injustice to the victims and witnesses:

- High pendency can lead to witnesses forgetting the facts of the case, they may die or become untraceable, and victims may lose faith in the justice system.

Negative impact on the economy:

- The delays in the justice system can also have a negative impact on the economy, as businesses may be delayed or prevented from moving forward due to unresolved legal disputes.

Initiatives taken to curb Judicial Pendency: -

Memorandum of procedure, 2016:

- It has been under discussion to bring transparency in judicial appointments and setting up a permanent secretariat in SC for maintaining records of high court judges.

Project Sahyog:

- Its main aim is to reduce pending cases.

Virtual court system:

- In the virtual court system, regular court proceedings are conducted virtually through videoconferencing. It ensures easy access to justice and reduces the pendency of cases.

e-Courts portal:

- It has been launched to improve access to justice using technology. It is a comprehensive platform for all stakeholders, such as litigants, advocates, government agencies, police, and citizens.

E-filing:

- The facility of submitting court cases electronically through the internet, providing benefits such as saving time and money, not requiring physical presence in court, automatic digitization of case files, and reducing paper consumption.

e-Payment of court fees and fines:

- The ability to make online payments for court fees and fines, reducing the need for cash, stamps, and cheques, and integrating with state-specific vendors for convenience.

Interoperable Criminal Justice System (ICJS):

- ICJS is an initiative of the e-Committee, Supreme Court to enable the seamless transfer of data and information among different pillars of the criminal justice system, like courts, police, jails, and forensic science laboratories, from one platform.

Fast track courts –

- Fast track courts are being set up by the government to expedite the justice delivery and reduce the pendency of cases.

Alternative Dispute Resolution:

- ADR mechanisms **like Lok Adalats, Gram Nyayalayas**, Online Dispute Resolution, etc., ensure timely justice.

Way forward/ Step taken to reduce pendency of cases: -

Increase the number of judges:

- One way to reduce the backlog of cases is to increase the number of judges in the Indian judiciary. This will allow more cases to be heard and decided more quickly.
- The **Law Commission of India (1987) recommended increasing the number of judges to 50 per million people.** This was reiterated by the Supreme Court (2001) and the Standing Committee on Home Affairs (2002).

Expand alternative dispute resolution methods:

- Alternative dispute resolution methods, such as mediation and arbitration, can resolve disputes more quickly and efficiently than traditional court proceedings.

Streamline the legal process:

- Efforts can be made to streamline the legal process, such as by using technology to manage cases and eliminate unnecessary steps. Example: e-courts projects.

Appointment of judges:

- Collegium should take adequate safeguards and transparency in selecting judges so that judges of high calibre and impeccable integrity are appointed to the higher courts.
- **An all-India judicial services examination can be considered** to maintain high standards in the judiciary.
- Articles 224A and 128 of the Constitution can be invoked to appoint ad hoc Judges.

Strengthen infrastructure:

- Government should provide adequate funds for developing and upgrading the judicial infrastructure, training judicial staff etc

Changes in criminal justice and procedural laws:

- Reduce the criminalization of violations and move towards the compounding of minor offences.

- Reform forensics and ballistics testing by outsourcing to accredited laboratories.

Grievance Redressal:

- Government departments must establish a strong internal grievance redressal mechanism and empower designated officers to decide disputes between employees and departments.

Create a law-abiding society:

- Introduce incentive and sanction-based models of motivation to ensure that citizens abide by the law.
- Prohibitive penalties should be imposed to check traffic violations, civic violations including littering in public, first-time petty offenders, etc.

Hibernating Unnecessary PILs:

- The Supreme Court should mandate summary disposal of all 'hibernating' PILs – those pending for more than 10 years before HCs – if they do not concern a question of significant public policy or law.

Conclusion: -

- Courts are **sitting on a pendency bomb,** and it has never been more urgent to strengthen the judiciary. Thus, there is a need to take a holistic and realistic view of the present situation of the Indian Judiciary.
- As justice is first virtue and judiciary are one of organ of state for check and balances and with pending cases, we are making this organ weaker so it is an need of an hour to take action on this otherwise *we can become prismatic society with time where justice become different for different person.*

Criminal Justice System

Why in News?

- Recently the union Home minister introduced three new Bills in the Lok Sabha that propose a complete overhaul of the country's criminal justice system. **The three Bills are:**
    - The Bharatiya Nyay Sanhita Bill, 2023, which will replace the IPC, 1860
    - The Bhartiya Nagrik Suraksha Sanhita Bill, 2023, which will replace the CrPC, 1898
    - The Bharatiya Sakshya Bill, 2023, which will replace the Evidence Act, 1872

What is the Criminal Justice System?

- The criminal justice system is the *set of laws, processes, and institutions that aim to prevent, detect, prosecute, and punish crimes, while ensuring the rights and safety of all people.*
- It includes institutions like police forces, judicial institutions, legislative bodies, and other supportive organizations like forensic and investigation agencies.

Objective:

- To prevent the occurrence of crime.
- To punish the transgressors and the criminals.
- To rehabilitate the transgressors and the criminals.
- To compensate the victims as far as possible.
- To maintain law and order in society.
- To deter offenders from committing any criminal act in the future

Need for Reforms in CJS: -

Colonial Legacy:

- The criminal justice system- both substantive and procedural- are replica of the Bristish colonial jurisprudence, which were designed with the purpose of ruling the nation.
- Therefore, the *relevance of these 19th century laws is debatable in the 21st century.*

Ineffective Justice Delivery:

- The purpose of the criminal justice system was to protect the rights of the innocents and punish the guilty, but nowadays the system has become a tool of harassment of common people.

Pendency of Cases:

- According to Law ministry, there are about 5.02 crore cases pending in the judicial system, especially in district and subordinate courts, which leads to actualization of the maxim Justice delayed is justice denied."

Huge Undertrials:

- India has one of the world's largest numbers of undertrial prisoners.
- According to National Crime Records Bureau (NCRB)-Prison Statistics India, 67.2% of our total prison population comprises of under trial prisoners.

Police Issue:

- Police are being a front line of the criminal judiciary system, which played a vital role in the administration of justice. Corruption, huge workload and accountability of police is a major hurdle in speedy and transparent delivery of justice.

What are the Proposed Changes in India's Criminal Justice System?

Proposed Amendments in the Bharatiya Nyay Sanhita Bill, 2023:

- The bill provides clear definitions for acts of terrorism and various offenses, such as separatism, armed rebellion against the government, and challenging the nation's sovereignty, which were previously scattered across different legal provisions.
- It abolishes the outdated and criticized offense of sedition, which was seen as a relic of colonial rule that suppressed free speech and dissent.
- The bill establishes capital punishment as the harshest penalty for mob lynching, a problem that has grown significantly in recent times.
- It suggests a 10-year prison term for engaging in sexual intercourse with women under false promises of marriage, a prevalent form of deception and exploitation.
- The bill introduces community service as an alternative form of punishment for specific crimes, potentially aiding in the rehabilitation of offenders and easing prison overcrowding.
- The bill imposes a strict time limit of 180 days for filing a charge sheet, aiming to expedite the trial process and prevent indefinite delays.

Proposed Amendments in the Bhartiya Nagrik Suraksha Sanhita Bill, 2023:

- The bill encourages the utilization of technology for legal proceedings, appeals, and deposition recording, allowing for video-conferencing during hearings.

    - It mandates the compulsory video recording of statements from survivors of sexual violence, which can aid in preserving evidence and preventing coercion or manipulation.
- The bill stipulates that the police must provide updates on the status of a complaint within 90 days, enhancing accountability and transparency.
- Section 41A of the CrPC will be renumbered as Section 35, with the addition of a safeguard *stating that arrests cannot be made without prior approval from an officer, at least at the rank of Deputy Superintendent of Police (DSP), particularly for offenses punishable by less than 3 years or for individuals above 60 years.*
- The bill requires that the police consult with the victim before withdrawing a case punishable by seven years or more, ensuring that justice is not compromised or denied.
- It allows for the trial and sentencing of fugitive criminals in absentia by the court, serving as a deterrent to those trying to evade justice.
- The bill empowers magistrates to consider offenses based on electronic records like emails, SMSs, and WhatsApp messages, facilitating evidence collection and verification.
- Mercy petitions in death penalty cases must be submitted to the Governor within 30 days and to the President within 60 days.
    - No legal appeal will be entertained against the President's decision in any court.

Proposed Amendments in the Bharatiya Sakshya Bill, 2023:

- The bill outlines electronic evidence as any data produced or transmitted by any device or system that can be stored or retrieved through any means.
- It establishes clear criteria for the acceptance of electronic evidence, including factors like authenticity, integrity, and reliability, designed to prevent the misuse or manipulation of digital information.
- The bill introduces specific rules governing the admissibility of DNA evidence, including requirements such as consent and maintaining a secure chain of custody, aiming to enhance the accuracy and dependability of biological evidence.
- It acknowledges expert opinions, such as those from medical professionals or handwriting analysts, as valid forms of evidence that can aid in establishing pertinent facts or circumstances in a case.
- The bill introduces the *principle of the presumption of innocence as a foundational element of the criminal justice system*, signifying that every individual accused of an offense is considered innocent until proven guilty beyond a reasonable doubt.

Issues in the Current Criminal Justice System of India: -

Pendency of Cases:

- According to the **National Judicial Data Grid,** there are over 5.02 crore cases pending in Indian courts across different levels of the judiciary. This leads to *delays in justice delivery, violation of the right to speedy trial, and loss of public trust in the system.*

Lack of Resources and Infrastructure:

- The criminal justice system suffers from inadequate funding, manpower, and facilities. There is a shortage of judges, prosecutors, police personnel, forensic experts, and legal aid lawyers.
- For a country of 135 million, there are only 21 judges per million population (as of February 2023).
- There are almost 400 vacancies in the high courts. And around 35% of the posts are lying vacant in the lower judiciary.

Poor Quality of Investigation and Prosecution:

- The investigation and prosecution agencies often fail to conduct thorough, impartial, and professional investigations. They face interference from political and other influences, corruption, and lack of accountability.

Human Rights Violations:

- The criminal justice system is often accused of violating the human rights of the accused, victims, witnesses, and other stakeholders. There are instances of custodial torture, extrajudicial killings, false arrests, illegal detentions, coerced confessions, unfair trials, and harsh punishments.

Outdated Laws and Procedures:

- The criminal justice system is based on laws and procedures that were enacted by the British in 1860. These laws are archaic and not in tune with contemporary times. They do not address new forms of crimes such as cybercrime, terrorism, organised crime, mob lynching, etc.

Public Perception:

- The Second ARC has noted that police-public relations are unsatisfactory in India because people view the police as corrupt, inefficient, and unresponsive, and often hesitate to contact them.

Committees' Recommendations to Reform the Criminal Justice System: -

Vohra Committee, 1993:

- To deal with the increasing problem of criminalisation of politics and nexus between politicians, bureaucrats, criminals, and anti-social elements.
- It recommended that an institution be set up to effectively deal with this menace by collecting intelligence from various sources and taking appropriate action against such elements.

Malimath Committee, 2003:

- Introducing a new **category of offences called 'social welfare offences'** for minor violations that can be dealt with by imposing fines or community service.
- Replacing the adversarial system with a 'mixed system' that incorporates some elements of the inquisitorial system such as allowing judges to play an active role in collecting evidence and examining witnesses.
- Reducing the standard of proof required for conviction from 'beyond reasonable doubt' to 'clear and convincing evidence'.
- Making confessions made before a senior police officer admissible as evidence.

Madhav Menon Committee, 2007:

- This committee was set up to draft a national policy on criminal justice. It suggested various principles and strategies to guide the reform process such as:
- Ensuring respect for human dignity and human rights in every stage of criminal justice.
- Promoting restorative justice that focuses on healing the harm caused by crime rather than inflicting punishment.
- Improving coordination and cooperation among various agencies involved in criminal justice such as police, judiciary, prosecution etc.

Significance of the Proposed Reform:

Modernization and Simplification:

- The reform seeks to modernize and simplify the criminal laws, making them more relevant to contemporary India. It acknowledges the evolving nature of crime, society, and technology, aligning legal provisions with the nation's ethos.

Repeal of Draconian Laws:

- It addresses concerns by repealing the controversial sedition law (Section 124A of the IPC), which has been criticized for its misuse to suppress dissent and criticism of the government, thereby upholding freedom of expression.

Inclusion of New Offenses:

- The reform introduces new provisions to address emerging challenges, including terrorism, corruption, mob lynching, and organized crime, which were not adequately covered by existing laws.

Gender Neutrality:

- By making some sexual offenses gender-neutral, the reform ensures that men, women, and transgenders can be both victims and offenders, promoting gender equality and fairness in the legal system.

Utilization of Electronic Evidence:

- The reform encourages the increased use of electronic evidence and forensic techniques throughout the criminal justice process, enhancing the efficiency and accuracy of investigations and trials.

Citizen Empowerment:

- It empowers citizens by enabling them to register police complaints at any police station, regardless of where the crime occurred, improving accessibility to justice. Additionally, it safeguards constitutional rights like the right to life, liberty, dignity, privacy, and a fair trial.

Issues in current proposed reforms to the criminal justice system: -

Lack of Consultation and Transparency:

- The bills were drafted by a Criminal Law Reforms Committee, 2020.
- The composition did not include any representatives from the judiciary, the bar, the civil society, or the marginalized communities. The committee also did not make its report or draft bills public for wider consultation and feedback.

Potential Violation of Human Rights:

- The bills have been criticized for using vague and broad terms that could infringe on the human rights of the accused, victims, witnesses, and other stakeholders.
- For example, the BNS introduces a new offence of "acts endangering sovereignty, unity and integrity of India" under Section 150, which is similar to

the repealed offence of sedition under Section 124A of IPC. This could be used to suppress dissent and free speech.

- Similarly, the BSB allows confessions made before a police officer to be admissible as evidence under Section 27A, which could increase the risk of custodial torture and coercion.
- The BNSS also gives wide powers to the police to arrest, search, seize, and detain without any judicial oversight or safeguards.

Lack of Coherence and Consistency:

- The bills have been accused of being inconsistent and contradictory with each other and with other existing laws. For example,
- The BSB also introduces **a new standard of proof for conviction from "beyond reasonable doubt" to "clear and convincing evidence", which is not defined or explained in the bill.**
- The BNSS also creates a new category of offences called "social welfare offences" that can be dealt with by imposing fines or community service, but does not specify which offences fall under this category.

Way- Forward: -

Inclusive Consultation:

- Commence a comprehensive consultation process that engages all stakeholders, including the general public, to incorporate a wide range of perspectives before implementing any reforms.

Human Rights Protections:

- Explicitly integrate human rights principles and safeguards into the proposed changes.
- Provide precise definitions and narrow down vague terms to prevent potential misuse of the laws, safeguarding individual liberties.

Consistent Legal Framework:

- Establish a consistent and coherent legal framework by aligning the proposed bills with existing laws. This harmonization ensures that the legal system operates seamlessly.

Technology Integration:

- Enhance the integration of technology throughout the criminal justice process. This includes adopting digital evidence collection, online proceedings, and video-recorded statements to expedite trials, reduce case backlogs, and enhance transparency.

Capacity Building:

- Invest in training, recruitment, and infrastructure to strengthen the capabilities of law enforcement agencies, the judiciary, and legal aid services.

Restorative Justice:

- Embrace restorative justice principles that prioritize reconciliation, restitution, and rehabilitation to address the underlying causes of criminal behaviour, decrease repeat offenses, and provide closure to victims.

Public Awareness:

- Launch awareness campaigns to educate the public about their rights and responsibilities within the criminal justice system.

Conclusion: -

- Reform of the criminal justice system is vital to create a fair, efficient, and accountable framework.
- By involving all stakeholders, safeguarding human rights, ensuring consistency, embracing technology, building capacity, and promoting restorative justice, we can strive for a system that truly serves the needs of society.
- **Ultimately, these reforms are not just about laws but about upholding the values of justice and equity that our society holds dear.**

New Map of China & Claim on Indian Land

Why in News?

- The Chinese government has recently introduced the "2023 version of China's official map," reasserting its territorial assertions over contested areas.

China's Claims in the New Map

Territorial Claims:

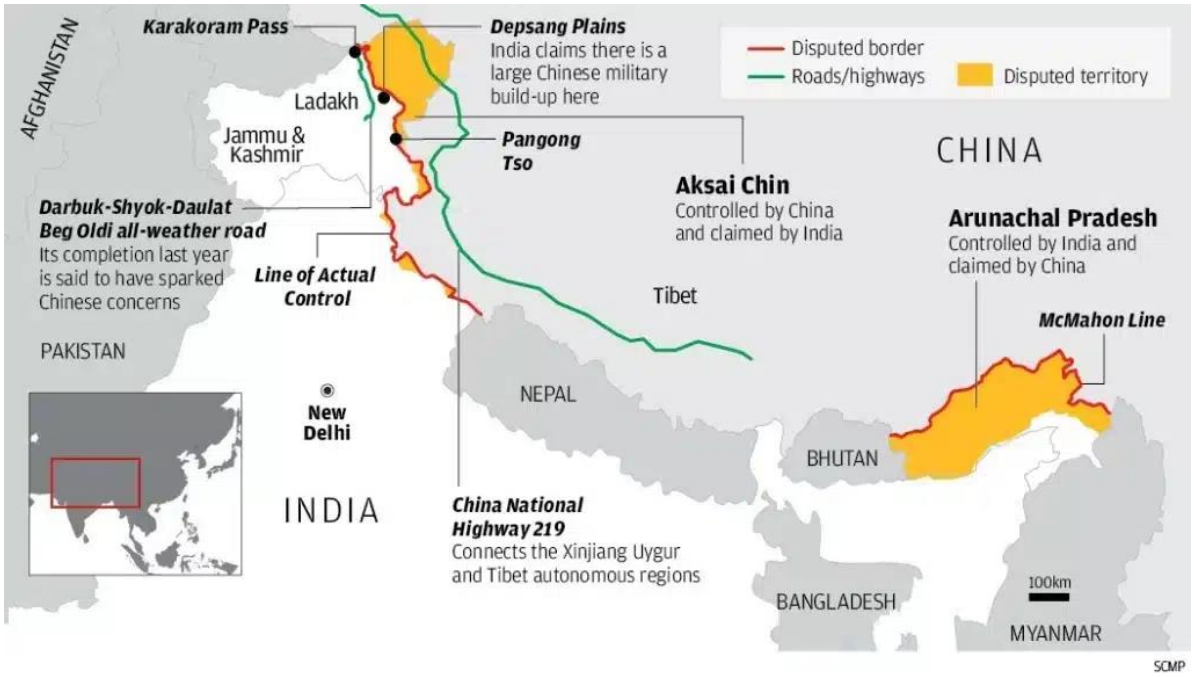
- The map includes China's territorial assertions, which cover areas like Arunachal Pradesh and the Aksai Chin Region.
- These claims have been a longstanding source of dispute between China and India.
- Additionally, the map highlights the controversial "Nine-Dash Line," which encompasses the entire South China Sea, emphasizing Beijing's territorial claims in this strategically important maritime area.
- Notably, the **map introduces a tenth dash line,** further emphasizing China's stance regarding Taiwan island.

Renaming of Places:

- China's release of the new map aligns with its previous actions, such as standardizing the names of places in Arunachal Pradesh, including areas close to the state capital.

Point of Contention Between India-China Border: -

- It encompasses the longstanding and intricate territorial disagreements along their shared border, which stretches over 3,488 kilometres.
- The primary areas of contention are Aksai Chin, situated in the western sector, and Arunachal Pradesh, located in the eastern sector.
- **In the case of Aksai Chin**, China governs it as part of its Xinjiang region, while India regards it as part of its union territory of Ladakh. Aksai Chin holds great strategic importance due to its proximity to the China-Pakistan Economic Corridor (CPEC) and its potential as a military passage.
- **Regarding Arunachal Pradesh,** China asserts its claim over the entire state and refers to it as "South Tibet," while India administers this region as one of its northeastern states and views it as an integral part of its national territory.
- **No Clear Demarcation:** The border between India and China is not clearly demarcated throughout and there are no mutually agreed Line of Actual Control (LAC) along certain stretches.
    - LAC came into existence after the 1962 Indo-China war.



Implications of China's New Map on India

Territorial Assertion:

- By incorporating disputed territories into its official map, China is reinforcing its territorial claims, challenging India's sovereignty over Arunachal Pradesh and Aksai Chin, and escalating the border dispute.

Diplomatic Tensions:

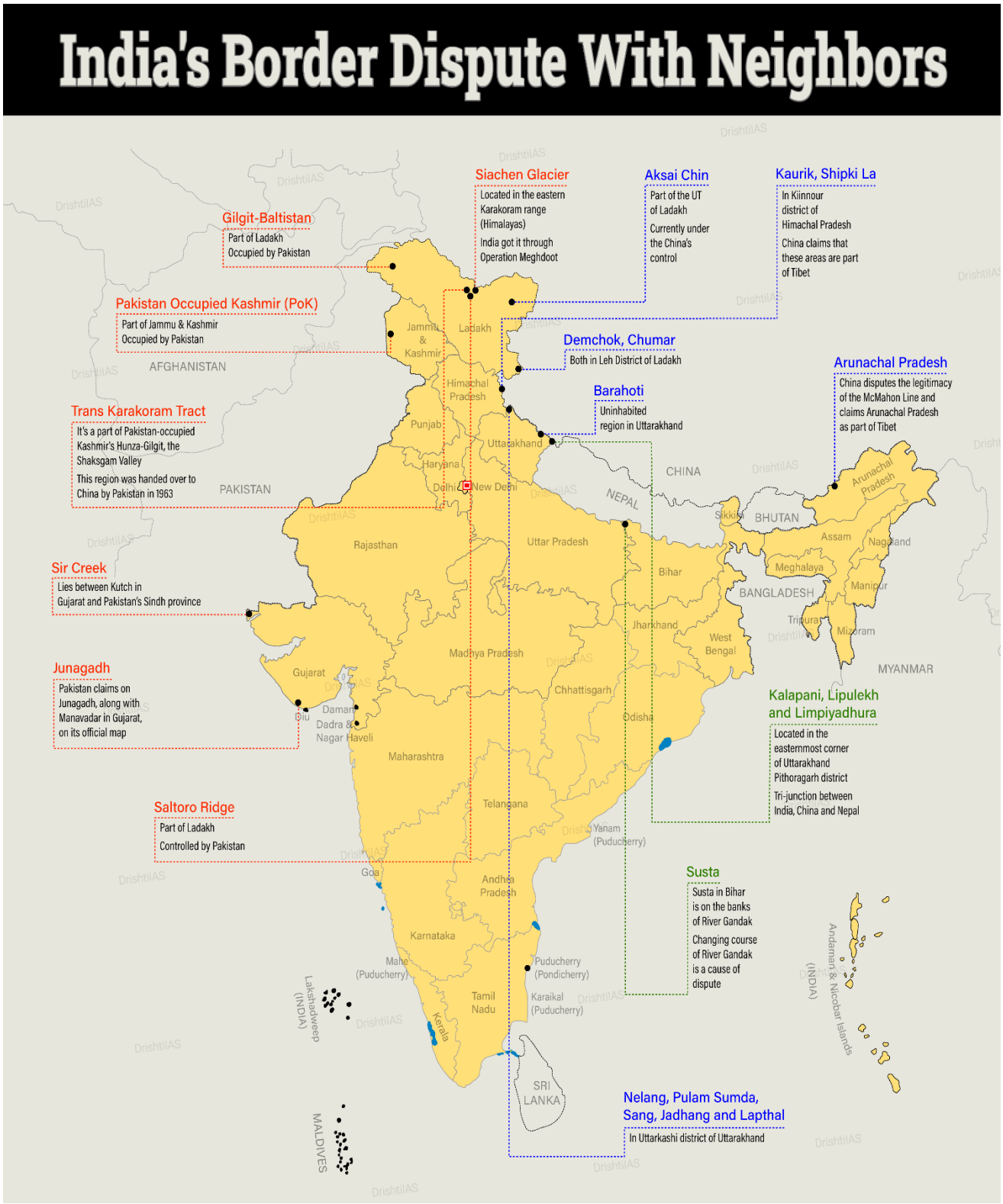
- China's actions can lead to diplomatic tensions between the two countries.
- India has consistently rejected China's territorial claims and will likely respond with reaffirmations of its own claims.

Impact on Bilateral Relations:

- It can strain India-China relations, affecting cooperation in various areas, including trade, investment, and people-to-people exchanges.

Regional Balance:

- The border dispute has implications for the broader regional balance of power.
- It can influence India's strategic alignment with other countries and regional groupings to counter China's influence.


India's Border Dispute With Neighbors
Siachen Glacier
Located in the eastern Karakoram range (Himalayas)
India got it through Operation Meghdoot
Aksai Chin
Part of the UT of Ladakh
Currently under the China's control
Kaurik, Shipki La
In Kiinnour district of Himachal Pradesh
China claims that these areas are part of Tibet
Gilgit-Baltistan
Part of Ladakh
Occupied by Pakistan
Pakistan Occupied Kashmir (PoK)
Part of Jammu & Kashmir
Occupied by Pakistan
Demchok, Chumar
Both in Leh District of Ladakh
Arunachal Pradesh
China disputes the legitimacy of the McMahon Line and claims Arunachal Pradesh as part of Tibet
Barahoti
Uninhabited region in Uttarakhand
Trans Karakoram Tract
It's a part of Pakistan-occupied Kashmir's Hunza-Gilgit, the Shaksgam Valley
This region was handed over to China by Pakistan in 1963
Sir Creek
Lies between Kutch in Gujarat and Pakistan's Sindh province
Junagadh
Pakistan claims on Junagadh, along with Manavadar in Gujarat, on its official map
Kalapani, Lipulekh and Limpiyadhura
Located in the easternmost corner of Uttarakhand Pithoragarh district
Tri-junction between India, China and Nepal
Saltoro Ridge
Part of Ladakh
Controlled by Pakistan
Susta
Susta in Bihar is on the banks of River Gandak
Changing course of River Gandak is a cause of dispute
Nelang, Pulam Sumda, Sang, Jadhang and Lapthal
In Uttarkashi district of Uttarakhand
AFGHANISTAN
PAKISTAN
CHINA
NEPAL
BHUTAN
BANGLADESH
MYANMAR
SRI LANKA
MALDIVES
Jammu & Kashmir
Ladakh
Himachal Pradesh
Punjab
Uttarakhand
Haryana
Delhi
New Delhi
Rajasthan
Uttar Pradesh
Bihar
Sikkim
Arunachal Pradesh
Assam
Nagaland
Meghalaya
Manipur
Tripura
Mizoram
Jharkhand
West Bengal
Madhya Pradesh
Chhattisgarh
Odisha
Gujarat
Daman & Diu
Dadra & Nagar Haveli
Maharashtra
Telangana
Yanam (Puducherry)
Goa
Andhra Pradesh
Karnataka
Mahe (Puducherry)
Puducherry (Pondicherry)
Karaikal (Puducherry)
Tamil Nadu
Kerala
Lakshadweep (INDIA)
Andaman & Nicobar Islands (INDIA)

Way to Tackle China's Territorial and Regional Assertiveness: -

Diplomacy and Dialogue:

- Continue engaging in diplomatic talks with China through established mechanisms like the Special Representative talks and Working Mechanism for Consultation and Coordination (WMCC) on India-China border affairs.
- Emphasize peaceful resolution, adherence to bilateral agreements, and the importance of maintaining peace and stability along the border.

Strengthen Border Infrastructure:

- Invest in improving border infrastructure, including roads, bridges, airstrips, and communication networks, to enhance mobility and response capabilities for Indian forces.
- Develop logistics hubs and forward bases to ensure swift deployment of troops and supplies in the border regions.

Enhance Military Preparedness:

- Invest in modernizing the armed forces with advanced equipment, technology, and surveillance capabilities to effectively monitor and respond to any border incidents.
- Focus on enhancing the training and readiness of troops stationed in border areas.

Regional and Global Partnerships:

- Strengthen partnerships with like-minded countries and regional organizations that share concerns about China's assertiveness in territorial disputes.
- Collaborate on intelligence-sharing, joint military exercises, and coordinated responses to regional challenges.

Economic and Trade Measures:

- Diversify economic ties to reduce dependence on China and enhance economic resilience.
- Explore trade agreements and partnerships with countries that can provide alternative markets and investment opportunities.

International Forums:

- Raise the border issue at international forums to garner support for a peaceful resolution based on international norms and principles.

- Uphold international norms and principles related to territorial integrity and dispute resolution mechanisms.
- Continue to engage with international legal experts to present India's case on the border issue.

Border Dispute Settlement Mechanisms between India and China: -

Shimla agreement of 1914:

- To demarcate the boundary between Tibet and North East India, a convention was held at Shimla in 1914, representatives of all three i.e. Tibet, China, and British India.
- After the discussion, the agreement was signed by British India and Tibet but not by the Chinese officials.
- Presently India recognizes but China rejected both the Shimla agreement and the McMahon line.

Panchsheel Agreement of 1954:

- The Panchsheel doctrine clearly indicated the willingness to 'Respect each other's sovereignty and territorial integrity'.

The Agreement on the Maintenance of Peace and Tranquillity:

- It was signed in 1993, which called for a renunciation of the use of force, recognition of the LAC, and the resolution of the border issue through negotiations.

The Agreement on Confidence Building Measures in the Military Field along the LAC:

- It was signed in 1996, which laid down pledges on non-aggression, prior notification of large troop movements, and exchange of maps to resolve disagreements over the LAC.

The Border Defence Co-operation Agreement:

- It was signed in 2013 following the Depsang Valley incident.

Conclusion: -

- China's release map reaffirms its territorial claims over disputed areas like Arunachal Pradesh and the Aksai Chin region. This move is consistent with China's assertive approach to its borders and geopolitical interests under President Xi Jinping's leadership.
- *Resolving this dispute will require delicate diplomacy, a nuanced understanding of historical claims, and a commitment to finding mutually agreeable solutions* otherwise this may lead us to another long-term flash point in the geopolitics of world.

BRICS

Why in News?

- The 15th BRICS summit, **held in Johannesburg, South Africa, carries significant importance in light of shifts in global geopolitics** and the dynamics of the world economy.
- Importantly, this summit represents the first physical meeting since 2019, owing to the COVID-19 pandemic.
- The **summit's theme** is centred around "BRICS and Africa: Partnership for Mutually Accelerated Growth, Sustainable Development and Inclusive Multilateralism".

Key Highlights of the 15th BRICS Summit: -

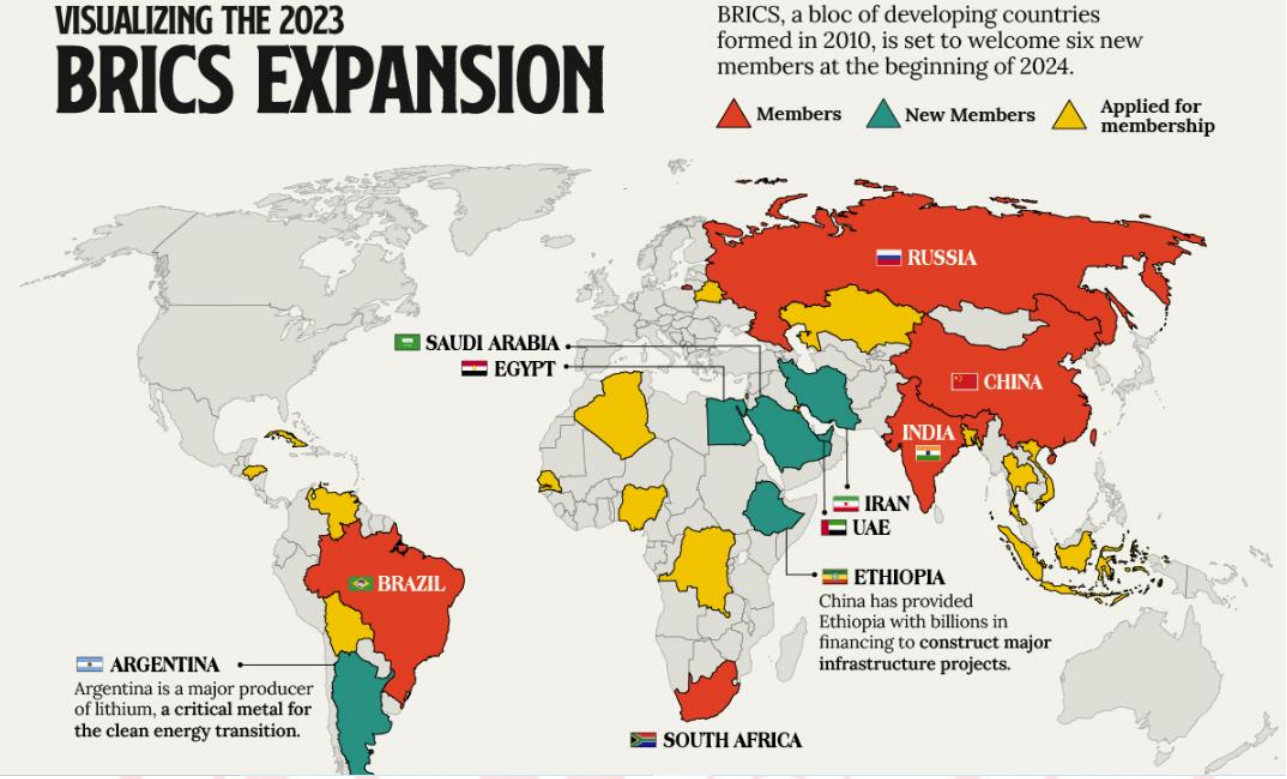
BRICS Expansion:

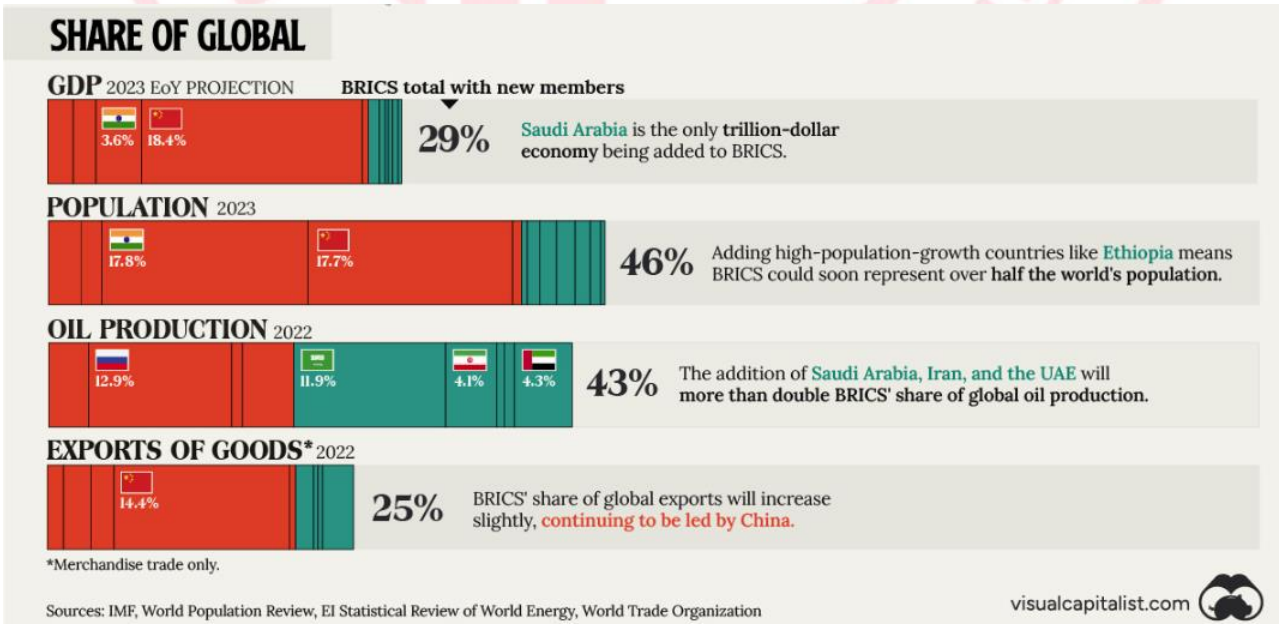
- BRICS marked its 15th summit by expanding its membership from five to eleven countries, reflecting a concerted effort to enhance its global standing.
- **Egypt, Iran, Saudi Arabia, UAE, Ethiopia, and Argentina joined the BRICS** fold, amplifying the group's representation across the Middle East, Africa, and South America.
- Full membership will take effect on January 1, 2024.
- The original BRIC members had two things in common: *large economies, and high potential growth rates.*
- The expanded BRICS-11 is a **less coherent** group; some are going through crises, and others are thriving. This could signal an expansion of the agenda beyond economics.

Joint Statement:

- Support for G20 Presidencies: Backed Brazil and South Africa's G20 Presidencies in 2024 and 2025, focusing on global South representation.
- Opposition to Unilateral Measures: Condemned unilateral coercive actions, advocated inclusive multilateralism, and upheld international law.
- Global Governance Enhancement: Aimed to improve global governance through agility, efficiency, representation, and democratic accountability.
- Human Rights Cooperation: Committed to cooperating on human rights under equality and mutual respect principles within BRICS and international platforms.
- Agriculture and Food Security: Strived for fair agricultural trade, ending hunger, sustainable agriculture, and resilient practices.

- **UN Reform:** Supported comprehensive UN reform, including the Security Council, for enhanced democracy, effectiveness, and developing country representation.
- Peaceful Conflict Resolution: Committed to peaceful dispute resolution through dialogue and inclusiveness while recognising women's participation in peace processes.





What is BRICS?

- BRICS is an acronym for the grouping of the world's leading emerging economies, namely Brazil, Russia, India, China, and South Africa.
- In 2001, the British Economist Jim O'Neill coined the term BRIC to describe the four emerging economies of Brazil, Russia, India, and China.
- The grouping was formalized during the first meeting of BRIC Foreign Ministers in 2006.
- South Africa was invited to join BRIC in December 2010, after which the group adopted the acronym BRICS.

Share of BRICS:

- The BRICS brings together five of the largest developing countries of the world, representing 41% of the global population, 24% of the global GDP and 16 % of the global trade.

Chairmanship:

- The chairmanship of the forum is rotated annually among the members, in accordance with the acronym B-R-I-C-S.
- India hosted the chair for the 2021 BRICS Summit.

Initiatives of the BRICS:

New Development Bank:

- During the Sixth BRICS Summit in Fortaleza (Brazil) in 2014, the leaders signed the Agreement establishing the New Development Bank (NDB - Shanghai, China).
- It has so far approved 70 infrastructure and sustainable development projects worth.

Contingent Reserve Arrangement:

- In 2014, the BRICS governments had signed a treaty on the setting up of the contingent reserve arrangement.
- The arrangement is aimed at forestalling short-term balance of payments pressures, providing mutual support, and strengthening the financial stability of the BRICS nations.

Customs Agreements:

- Customs agreements were signed to coordinate and ease trade transport between BRICS countries.

Launched of Remote Sensing Satellite:

- In August 2021, the five space agencies signed an agreement on the Cooperation on BRICS Remote Sensing Satellite Constellation.

BRICS Payment System:

- The BRICS nations are working towards establishing a payment system that can serve as a substitute for the SWIFT payment system.
- It is considered an alternative to the dollar-dominated payment system to reduce the dependence on the dollar-based system.

Common Currency:

- The BRICS leaders agreed to explore the possibility of creating a common currency for trade and investment among the BRICS countries.
- They tasked their finance ministers and central bank governors to study the feasibility and benefits of such a currency, which could reduce their dependence on the US dollar and other major currencies.

Objectives of BRICS: -

Rejection of Emerging Global Binary Divide:

- India and other BRICS members reject the idea of an emerging global binary divide, which suggests a world characterised by two opposing and dominant powers, often likened to a new Cold War. They do not agree with this perspective and consider it short-sighted.

Assertion of Strategic Autonomy:

- BRICS members, including India, are emphasizing their commitment to asserting their strategic autonomy.
- This implies that they want to make independent decisions and policies on the global stage, rather than being aligned with any superpower or bloc.

Multipolar World Order:

- BRICS countries are advocating for a multipolar world order. They envision a world where power and influence are distributed among multiple major players rather than being concentrated in the hands of a few dominant nations.

Demand for Voice and Respect for Interests:

- BRICS member nations are demanding that their voices be heard and their interests respected in international affairs.

- This suggests a desire for a more equitable and inclusive global governance system where the concerns of emerging economies are taken into account.

Reasons for the BRICS expansion:

- China's strategic move for global influence.
- FOMO: Fear of missing out on a visible club.
- Limited options in other groups.
- Anti-western sentiment and Global South unity.

What is the significance of BRICS for India?

Multi-alignment:

- It is an issue-based alignment strategy, which aims to simultaneously participate and pursue its interests in multiple strategic and economic coalitions, such as the Quad and BRICS.

Reflect multidirectional foreign policy:

- It strengthens economic prosperity, technology advancements, research and innovation, norm influencing, and strengthening security.

Diplomacy:

- It allows India to pursue a development focused diplomatic engagement which aims at increasing the membership of BRICS.

Energy security:

- New Members with having large oil reserves.

Combating terrorism

Climate change financing

Geopolitical force:

- BRICS attempts to amplify non-traditional security threats and promote economic security within the forum.

Political push:

- It would be a political push against unfair coercive practices.
- European Union’s Carbon border tax Economic transaction and Unilateral sanction

Strategic interest:

- It is the first in-person summit since the military standoff with China at the Line of Actual Control in 2020.
- Ahead of summit, 19th round of India-China Corps Commander Level Meeting resulted in a joint statement is a positive sign.

Challenges India Faces in its Engagement with the BRICS: -

Balancing Rival Interests:

- India has to balance its *relations with China and Russia, which are increasingly seen as strategic rivals* by the West.
- China's rise poses a major challenge and threat to India's security and interests, especially on issues such as border disputes, maritime security, trade imbalance, technology competition, and human rights.
- Russia's involvement in the Ukraine war and its alignment with China have also raised concerns in India about its traditional partner's reliability and credibility.

Protecting/Practicing and Advocating Democratic Principles:

- India must deal with Western normative expectations, without compromising its autonomy or sovereignty.
- India does not want to alienate or antagonize other countries in the global South, who may see merit in China's or Russia's efforts at expanding the membership or influence of non-western forums such as BRICS or SCO.
- India must pursue a pragmatic and principled foreign policy that serves its national interests and values.

Managing Bilateral Differences:

- India has unresolved border disputes and strategic rivalry with China and Pakistan, which affect its relations with the BRICS.
- India also has divergent views from Russia on issues such as Afghanistan, Iran, and the Indo-Pacific.
- India must manage these bilateral differences while pursuing multilateral cooperation within the BRICS.
- India's persistent trade deficit with China has raised concerns about the fairness of economic engagement.
- This trade imbalance could strain India's economic interests within BRICS and affect its overall economic stability.

Balancing China's Dominance:

- China is the largest and most influential member of the BRICS, with its economic, military, and diplomatic clout surpassing that of the other four members.
- India must balance its interests and values with its need to cooperate with China on common issues within the BRICS framework.

Geopolitical Rivalries:

- India's complex geopolitical relationships with some BRICS members, such as China and Russia, pose challenges to maintaining a united front on various global issues.
- Disagreements on regional conflicts and security matters could hinder effective cooperation.

Developmental Disparities:

- Bridging the development gap among member countries to ensure equitable benefits from cooperation remains a significant challenge.

Coordination on Multilateral Platforms:

- While BRICS aims to reform global governance institutions, including the United Nations and the International Monetary Fund, member countries often have different priorities and approaches to these reforms.

Varied Security Concerns:

- BRICS member countries have diverse security concerns, ranging from terrorism and regional conflicts to cyber threats.

Shifting Global Alliances:

- As geopolitical dynamics evolve, some BRICS members may seek closer ties with countries or organizations outside the group.
- This can impact the cohesion and collective bargaining power of BRICS on the global stage.
- India sees BRICS as a **"non-western" rather than an "anti-western" group, emphasizing the platform's diversity of perspectives**.

Challenges of BRICS Grouping: -

Overlap with other groupings:

- There is a **parallel grouping of democracies known as IBSA** (India, Brazil, and South Africa), which can lead to overlap in mandates and pose a challenge for BRICS to manage.

Economic slowdown and trade disputes:

- The ongoing economic slowdown and trade disputes among member states can impact the group's ability to achieve its objectives.

Geopolitical tensions:

- The BRICS countries have different geopolitical interests and have been involved in regional conflicts and disputes. **For example**, China's BRI, 'string of pearls', and developments at the Indo-China border have raised tensions with India.

The dominance of three countries:

- The overwhelming influence of Russia, India and China could potentially hinder the ability of other members, such as Brazil and South Africa, to have a meaningful impact on the group's decisions and direction.

Paradox of BRICS:

- Despite several achievements, it began to lose its sparkle. The group may have lost its mojo, but numerous nations want to be admitted, thus showing the paradox of BRICS.

BRICS Currency and De-Dollarization:

- In the 15th Summit of BRICS, Brazil's President proposed the creation of a common currency for BRICS nations to reduce vulnerability to dollar exchange rate fluctuations.
- **Difference of opinion:** While Brazil sees a common currency as a means of reducing vulnerabilities and increasing payment options, other BRICS leaders have varying opinions.
- Challenges of a BRICS currency include the need for banking and fiscal unions, macroeconomic convergence, and trade imbalances.
- De-dollarization would require numerous global entities to independently adopt other currencies.

Criticisms Against BRICS?

Lack of Shared Vision:

- Western commentators have criticised BRICS for not having a clear and cohesive shared vision.

Being a "Talk-Shop":

- BRICS is accused of being primarily a forum for discussion and dialogue rather than an organisation that takes concrete actions or achieves meaningful outcomes.
- In other words, it is seen as a platform where leaders from these countries engage in discussions but do not produce tangible results or solutions.

No Worthwhile Achievements:

- Critics argue that BRICS has not produced any substantial or significant achievements that would justify its existence as a bloc.
- They may contend that the group's activities have not had a meaningful impact on global affairs or have failed to address key challenges effectively.

Possible Areas of Cooperation Within BRICS: -

Cooperation Within the Group:

- BRICS needs to shed the centrality from China and create a better internal balance, reinforced by the urgent need for diversification.
- For BRICS to remain relevant over the next decades, each of its members must make a realistic assessment of the opportunities and inherent limitations.
- The grouping shall also explore the 'BRICS plus'cooperation at more levels and in a wider scope.

Upholding Universal Security:

- BRICS countries should be builders of universal security. Seeking one's own security at the expense of others will only create new tensions and risks.
- It is important to respect and guarantee the security of every country, replace confrontation with dialogue and partnership, and promote the building of a balanced, effective, and sustainable regional security architecture.
- Also, it is equally important to strengthen political mutual trust and security cooperation, maintain communication and coordination on major international and regional issues, and accommodate each other's core interests and major concerns.

Securing Economic Interests:

- BRICS countries should be contributors of common development.
- Facing the rising tide of de-globalisation and the increase of unilateral sanctions, BRICS countries should enhance mutually beneficial cooperation in supply chains, energy, food, and financial resilience.
- Also, it will be useful for BRICS to develop an institutional research wing, along the lines of the OECD, offering solutions which are better suited to the developing world.

Public Health Governance:

- BRICS countries should fully leverage their respective strengths, and jointly promote the development of global health governance in a direction in favour of developing countries.
- India's vision of 'One Earth, One Health' contributes to multilateral cooperation on public health.

A Global Governance Philosophy:

- Global challenges are emerging one after another. Coping with these challenges requires coordination among global actions.
- Safeguarding the international system is essential while ensuring that international affairs have participation by all, international rules are formulated by all, and development outcomes are shared by all.

Conclusion:

- The 15th BRICS summit holds multifaceted importance for India, offering a platform for addressing geopolitical concerns, facilitating bilateral talks, and advancing economic collaborations.
- As the global landscape continues to evolve, BRICS remains a critical forum for emerging economies to engage and collaborate on key global challenges.
- The outcomes of this summit will not only impact the member nations but also shape the broader trajectory of international relations and cooperation.
- Expansion of the BRICS group has brought considerable geo-strategic value to the grouping. The BRICS through its current summit has asserted that their "strategic partnership" will be directed at achieving "a more representative, fairer international order".

Question for Practice: -

1. Assess the role of BRICS in coming decade considering the discussions at the 15th BRICS summit. Examine the challenges and benefits of expanding BRICS membership beyond its core group and its implications for global dynamics. (15 marks, 250 words)

PYQs

1. Compare the significance of IBSA and BRICS in the context of India's multilateral diplomacy (UPSC Mains 2012)
2. India has recently signed to become a founding member of the New Development Bank (NDB) and also the Asian Infrastructure Investment Bank (AIIB). How will the role of the two Banks be different? Discuss the strategic significance of these two Banks for India. (UPSC Mains 2014)

GS 3

Forest Conservation and Recent Amendment

Why in News?

- The Forest Conservation (Amendment) Bill passed in the Lok Sabha.
- With only 21 percent of India's land area having forest cover and even more worryingly, only 12.37 percent intact natural forest.

Syllabus of Mains – GS 3 – Conservation and GS 2- Issues relating to development

Introduction

- The Lok Sabha has approved the Forest Conservation (Amendment) Bill, which enforces more stringent criteria for designating protected areas.
- Under the bill, only land officially designated as a forest according to the Indian Forest Act of 1927 or other relevant laws will be eligible for protected status.
- This departure from the previous, more lenient forest definition raises concerns as it could potentially endanger extensive forested areas and exclude approximately 15% of India's total forest coverage, mainly comprising unclassified forests.
- Despite government assurances of adherence to the Forest Rights Act, worries persist about the rights of communities dependent on these forests.

Highlights of the Bill

- The Bill amends the Forest (Conservation) Act, 1980 to make it applicable to certain types of land. These include land notified as a forest under the Indian Forest Act, 1927 or in government records after the 1980 Act came into effect. The Act will not be applicable for land converted to non-forest use before December 12, 1996.
- It also exempts certain types of land from the purview of the Act. These include land within 100 km of India's border needed for national security projects, small roadside amenities, and public roads leading to a habitation.
- The **state government requires prior approval of the central government to assign any forest land to a private entity.** The Bill extends this to all entities, and allows the assignment to be made on terms and conditions specified by the central government.

- The Act specifies some activities that can be carried out in forests, such as establishing check posts, fencing, and bridges. The Bill also allows running zoos, safaris and eco-tourism facilities.

Issue with the Proposed Amendment

Overturning the 1996 Supreme Court ruling:

- The amendment will essentially overturn the significant 1996 Supreme Court decision in the **case of T N Godavarman vs. Union of India**. This ruling had broadened the definition of forests to encompass all natural ecosystems, going beyond the limitations set by official government records.

Narrowing the Forest Definition:

- The amendment suggests constraining the forest definition to regions documented as "forest" in governmental archives starting from **October 25, 1980.** This modification aims to redefine the extent of land categorized as a forest, leaving out areas not labeled as such following the mentioned date.

Diminishment of Legal Safeguard for Extensive Forested Regions:

- The amendment's aftermath will lead to the removal of legal safeguards for vast expanses of forests, accounting for around 27.62% of India's overall forested expanse. These regions are situated beyond the confines of areas officially designated as Recorded Forest Areas.

About Forest Loss in India

Magnitude of Forest Depletion:

- As indicated by findings from the Centre for Science and Environment (CSE), India has experienced a remarkable reduction of more than 31,000 square kilometres in forested land from 2001 to 2018.
- Numerous developmental undertakings including mining, dam construction, road expansion, and urban growth have collectively played a role in this extensive decline of forested areas.

Global Position of India:

- The report from CSE underscores that India holds a place within the top 10 nations worldwide concerning the reduction of forested areas.
- This concerning placement underscores the gravity of the matter and underscores its potential ramifications on ecological equilibrium and biodiversity.

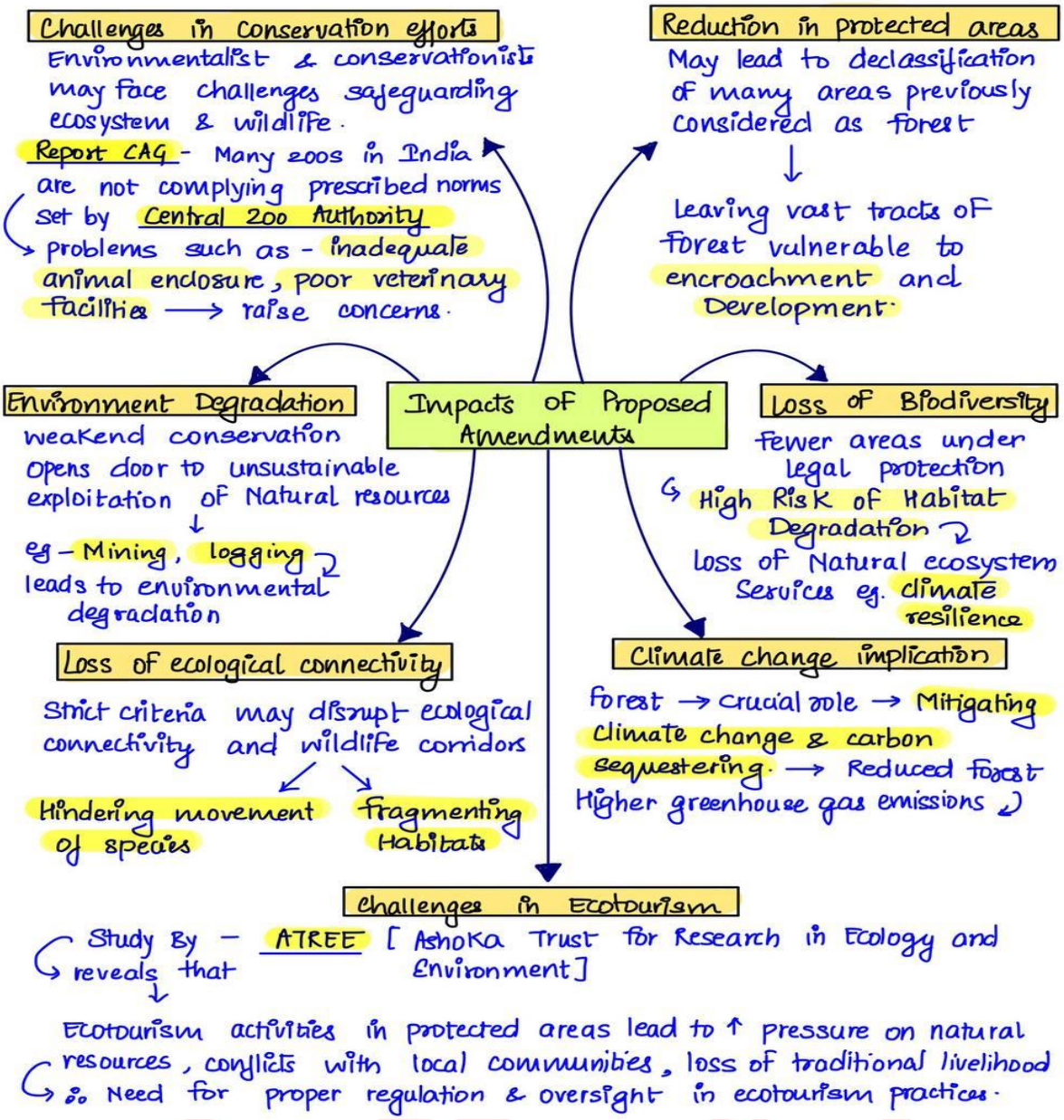
Tribal and Indigenous Communities:

- Many forest-dwelling tribal and indigenous communities depend on forests for their livelihoods and cultural practices.
- Deforestation can lead to displacement and loss of traditional knowledge.

Rising Patterns of Forest Depletion:

- In the last twenty years, there has been a disturbing upswing in the decline of forested regions.
- This upward trend in deforestation presents significant dangers to ecological equilibrium, habitats for wildlife, and endeavors to counteract climate change.

Impacts of the Proposed Amendment: -



Implications for Forest-Dwelling Communities: -

Disregard for Rights:

- The exclusion of numerous projects from the approval procedure implies the exclusion of consultations with forest-dwelling communities.
- This contravenes the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, which mandates obtaining **informed consent from local communities via their gram sabhas** prior to any actions.
- By neglecting this legal obligation, the rights of these communities residing in forests are compromised.

Insufficient Acknowledgment of Forest Rights:

- As outlined in the Ministry of Tribal Affairs (MoTA) report, a mere fraction of the claims submitted by forest-residing communities under the Forest Rights Act have received approval.
- This obstructs their capacity to assert authority over forest resources, resulting in feelings of insecurity and susceptibility.

Potential for Social Turmoil and Strife:

- Refusal or infringement upon their rights may potentially trigger social unrest and conflict within these communities, as they endeavor to safeguard their land, sustenance, and cultural legacy.

Forced Displacement and harassment:

- Refusal or breach of forest rights has resulted in instances of forced eviction, relocation, mistreatment, and even aggression targeted at forest-residing communities.
- This exacerbates the marginalization of already susceptible groups and disturbs their customary way of existence.

Livelihood Challenges:

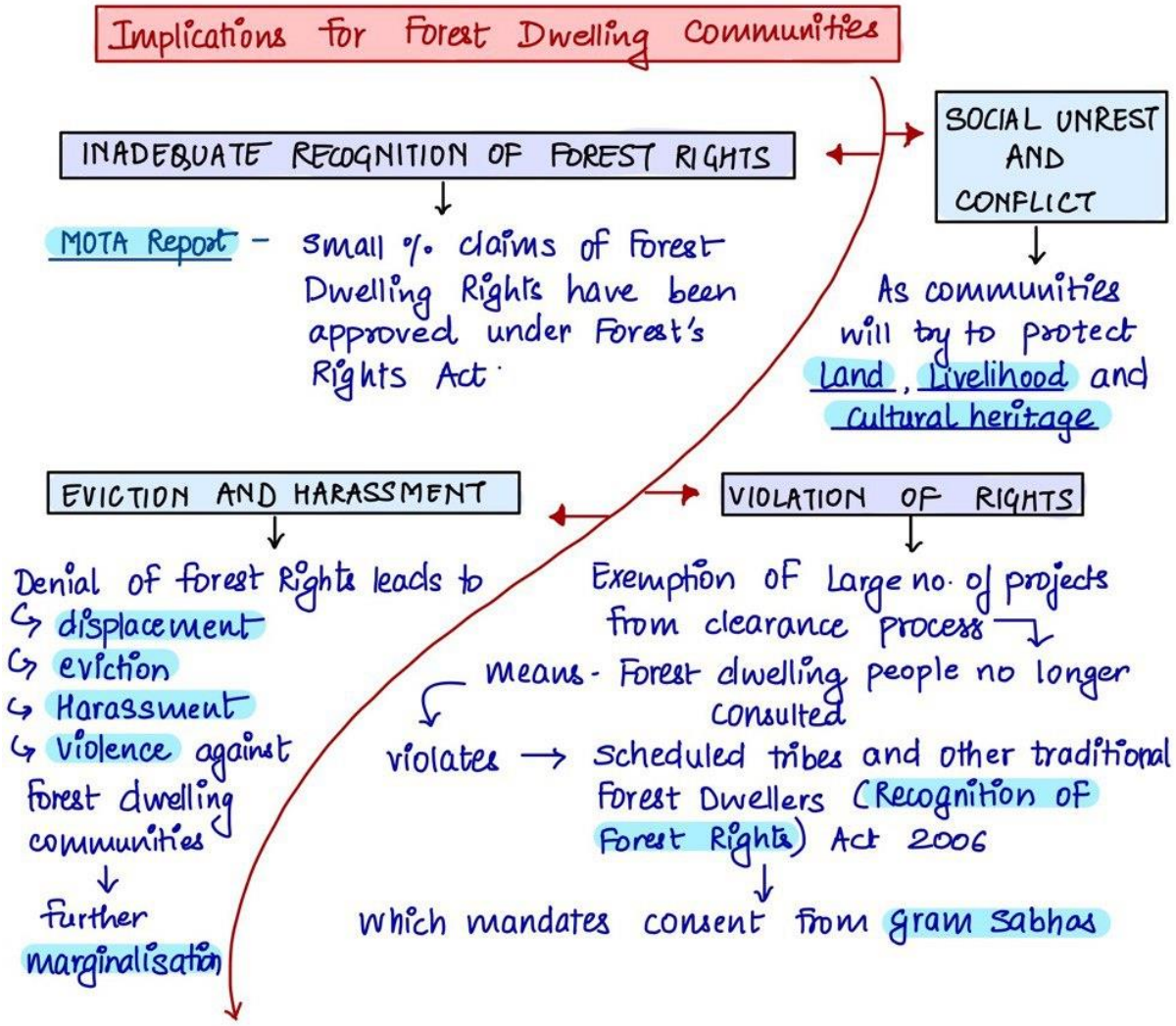
- Forest-dwelling communities rely heavily on forest resources for their livelihoods.
- Ambiguous laws can disrupt their economic activities, leading to poverty and dependency.

Loss of Traditional Knowledge:

- Vague laws might not consider the traditional ecological knowledge that these communities possess.
- This knowledge is often essential for sustainable forest management and biodiversity conservation.

International Commitments:

- International agreements like the United Nations Declaration on the Rights of Indigenous Peoples emphasize the importance of recognizing and protecting the rights of indigenous communities.



How will India's Ecological Security and Commitments be Compromised by this amendment?

Violation of Domestic and International Obligations:

- The revisions clash with India's domestic and worldwide obligations to safeguard its environment and biodiversity.
- Pledges such as the National Forest Policy (1988), National Biodiversity Action Plan (2008), National Action Plan on Climate Change (2008), Convention on Biological Diversity (1992), UN Framework Convention on Climate Change (1992), and Paris Agreement (2015) underscore the importance of conserving and sustainably administering natural resources.

Contradiction with Forest Conservation Act's Preamble:

- The proposed amendments to the Forest Conservation Act go against its stated purpose of providing for the conservation of forests and matters connected therewith.

- Instead of promoting conservation, the amendments may lead to the degradation of forest ecosystems.

Effects on Environmental and National Security:

- The envisioned amendments have the potential to undermine India's environmental security by depleting its natural assets.
- This could result in diminished adaptability to the consequences of climate change and imperil societal cohesion.
- Overlooking the safeguarding of the environment can trigger far-reaching repercussions for diverse dimensions of national security.

Threats to Biodiversity:

- India is recognized as one of the 17 megadiverse countries globally, hosting approximately 8% of the world's biodiversity.
- The nation's rich biodiversity contributes to its ecological resilience and is a valuable global heritage.

Natural Disaster Mitigation:

- Healthy forests contribute to mitigating natural disasters such as landslides and floods.
- Amendments that allow unchecked deforestation could reduce the natural resilience of ecosystems, compromising disaster management efforts.

Sustainable Development Goals (SDGs):

- Amendments that prioritize short-term economic interests over long-term ecological sustainability might hinder progress towards achieving SDGs related to life on land, climate action, and partnerships for the goals.

Way Forward

Integrated Approach:

- Adopting an integrated and landscape-level approach for conservation and development is essential.
- Identifying and prioritizing critical wildlife habitats, corridors, and buffer zones, while ensuring ecological connectivity and compatibility among different land uses, can balance developmental needs with ecological preservation.

Multi-Stakeholder Partnerships:

- Forge partnerships between government agencies, NGOs, academia, and indigenous communities to collectively address ecological challenges and find sustainable solutions.

Community Participation:

- Promoting participatory and community-based approaches for forest and wildlife management is vital.
- Involving local communities in decision-making, planning, and benefit-sharing ensures the protection of their rights and fosters a sense of ownership and responsibility towards conservation.

Scientific Approach:

- Enhancing the scientific and technical capacity for environmental assessment and monitoring, using modern tools like remote sensing, geographic information systems, satellite imagery, drones, and citizen science, can aid in informed decision-making and conservation efforts.

Robust Environmental Impact Assessment (EIA):

- Enforce comprehensive EIAs for projects involving forest land diversion to assess potential ecological and social impacts.
- Use the findings to guide decisions that prioritize ecological security while accommodating development needs.

Strengthen Legal Safeguards:

- Reassess and refine amendments to ensure that they align with ecological and conservation objectives.
- Embed clear provisions for protecting biodiversity, indigenous rights, and sustainable resource management.

Conclusion

- Intricate balance between ecological security and developmental aspirations demands a prudent approach when considering amendments to the forest act.
- As India navigates its journey towards progress, it must do so while upholding its steadfast commitments to safeguard its rich natural heritage and fulfil its international obligations.

Question for Practice

- Critically examine the implications of the proposed amendments to the Forest (Conservation) Act, 1980.

AI Disruption

Context-

- Global Generative AI market is projected to experience explosive growth in the coming years, with a **45% compound annual growth rate expected from 2021 through 2028.**
- As the commoditization of AI services becomes more widespread, business models of industries, from software development to entertainment, will change drastically.
- LLMs (Large Language Models) and Generative AI are set to automate various tasks that require natural language understanding – for instance, summarisation, translation, answering questions, coding, and even conversation.

Generative AI and Large Language Models (LLMs): -

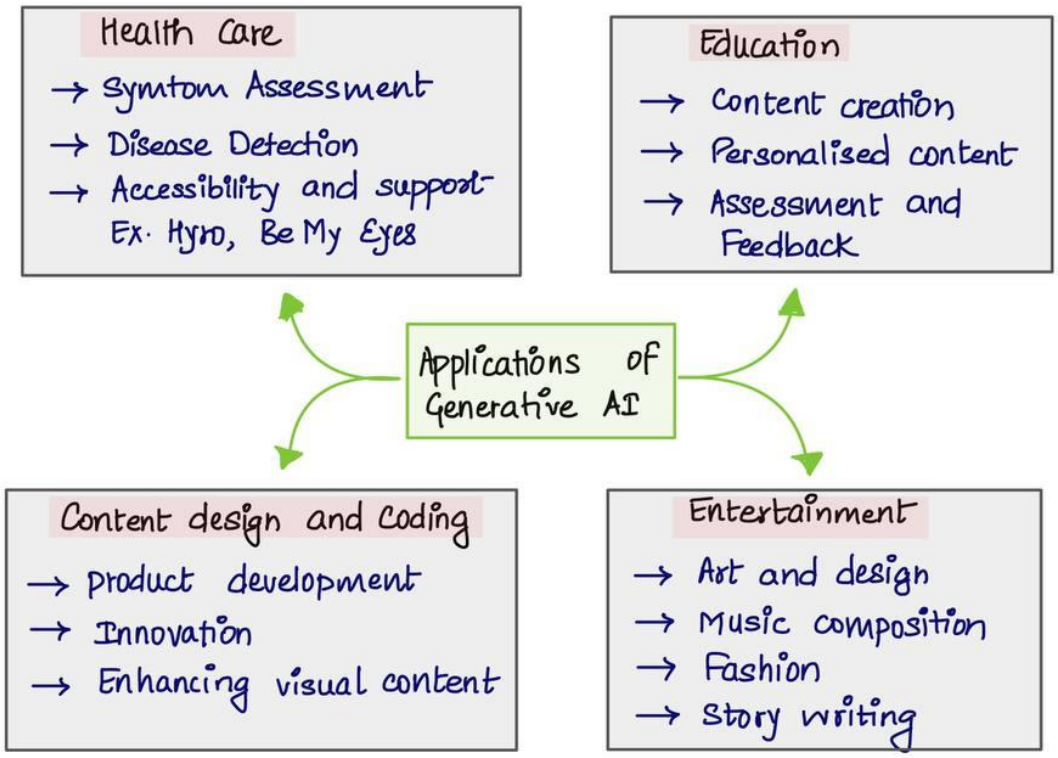
Generative AI:

- Generative AI refers to the subset of artificial intelligence that focuses on creating systems capable of generating content that is similar to what a human might produce.
- These systems learn from patterns in existing data and then use that knowledge to produce new, original content.
- This content can take various forms, such as text, images, music, and more.

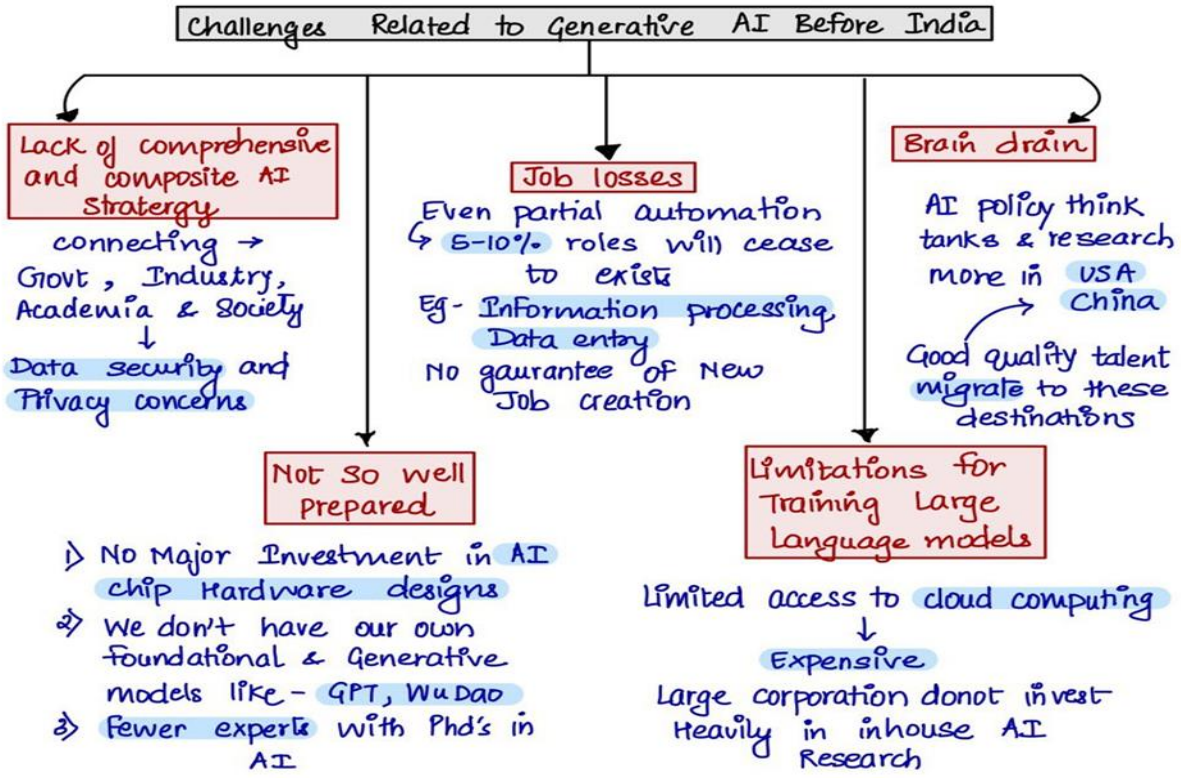
Large Language Models (LLMs):

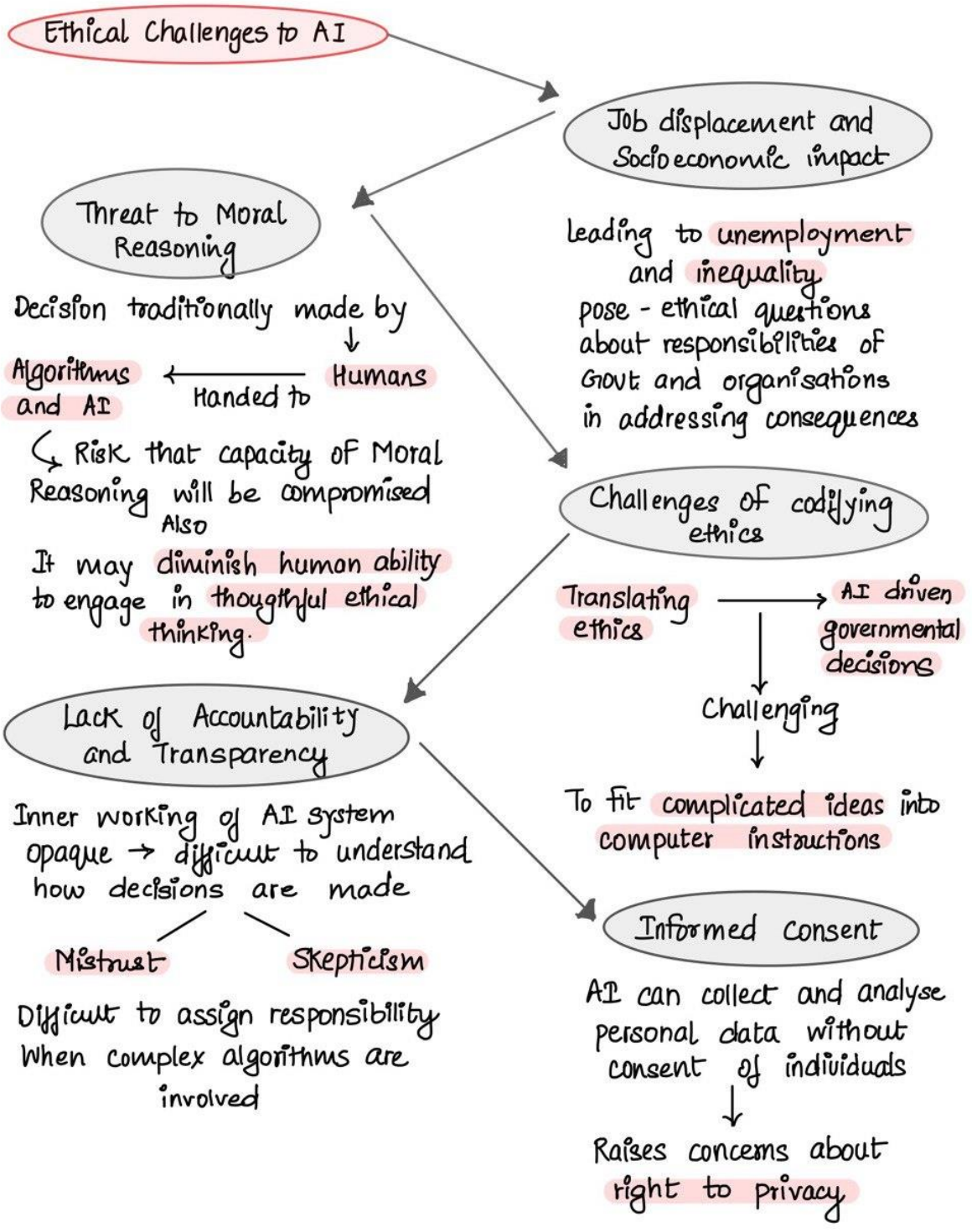
- LLMs are a **specific class of generative AI models** that are trained to understand and generate human-like text.
- These models are built using deep learning techniques, particularly using neural networks.
- They can generate coherent and contextually relevant text given a prompt or input.
- One of the most well-known examples of LLMs is OpenAI's GPT (Generative Pre-trained Transformer).

Applications of Generative AI



Challenges related to Generative AI before India




Ethical Challenges to AI
Job displacement and Socioeconomic impact
Leading to unemployment and inequality
pose - ethical questions about responsibilities of Govt and organisations in addressing consequences
Threat to Moral Reasoning
Decision traditionally made by
Humans
Handed to
Algorithms and AI
Risk that capacity of Moral Reasoning will be compromised
Also
It may diminish human ability to engage in thoughtful ethical thinking.
Challenges of codifying ethics
Translating ethics
AI driven governmental decisions
Challenging
To fit complicated ideas into computer instructions
Lack of Accountability and Transparency
Inner working of AI system opaque → difficult to understand how decisions are made
Mistrust
Skepticism
Difficult to assign responsibility When complex algorithms are involved
Informed Consent
AI can collect and analyse personal data without consent of individuals
Raises concerns about right to privacy

Policy Measures: -

Develop a Comprehensive National AI Strategy:

- Creating a well-defined national AI strategy is crucial. This involves bringing together various stakeholders including government agencies, industry representatives, researchers, and ethicists.
- The strategy should outline the country's goals for AI development, ethical guidelines, regulatory frameworks, and plans for responsible deployment. It should also consider potential risks, such as bias and privacy concerns, and how to address them.

Establish AI Policy Think Tanks and Research Institutes:

- Think tanks and research institutes can play a vital role in fostering innovation and nurturing AI talent.
- These institutions can conduct in-depth research on AI trends, ethics, and policy implications.

Foster Collaborations and Responsible AI Applications:

- Collaboration between academia, industry, and international partners is essential for sharing knowledge, expertise, and best practices. By fostering these collaborations, countries can develop responsible AI applications that adhere to ethical standards, privacy regulations, and safety protocols.

Policy and Legal Measures for Worker Transition:

- To ensure a smooth transition for workers, it's essential to implement policy and legal measures that protect their rights and livelihoods.
- These measures may include severance payments, advance notice of automation, and regulations that prohibit discriminatory AI systems in the workplace. Creating an environment where workers are informed about impending changes and have support can alleviate the anxieties associated with job displacement.

Tax Breaks and Incentives for Business Retraining:

- Incentivizing businesses to retrain their workers can be achieved through tax breaks, grants, or other financial incentives.
- This encourages companies to invest in their workforce's skill development, ensuring that their employees are equipped to handle the evolving job landscape.

Enhancement of Social Safety Nets:

- Enhancing social safety nets is vital to provide a safety net for workers facing job displacement. This may involve reforms to pensions, insurance, and employment regulations to accommodate the changing nature of work.

Job Placement Services and Support:

- Creating job placement services as part of the strategy can assist displaced workers in finding new roles that align with their skills and aspirations.
- These services could involve career counselling, job matching, and facilitating connections with employers in emerging industries. Support in navigating the job market can help workers transition more effectively.

Steps taken by the Government in the field of AI: -

National AI Portal of India:

- Launched in 2020, is a one-stop digital platform for artificial intelligence-related developments in the country. It showcases AI initiatives, resources, events, research, and innovation by various stakeholders from academia, industry, and government.

Responsible AI for Youth programme:

- Launched along with the portal, aims to empower young students with the skills and knowledge to create meaningful social impact solutions using AI.
- It involves online training modules, project-based learning, mentorship, and national-level project competition.

The Global Partnership on Artificial Intelligence (GPAI)

- India is a founding member, is an international and multi-stakeholder initiative to guide the responsible development and use of AI, grounded in human rights, inclusion, diversity, innovation, and economic growth.

"AI for All":

- India's AI strategy is known as "AI for All", which focuses on leveraging AI for inclusive development, representing the country's 'AI for Social Good' vision.
- It was formulated by NITI Aayog in 2018 and covers five core areas for application of AI: agriculture, education, health, smart cities/infrastructure, and transport.

The FutureSkills PRIME programme:

- Launched by MeitY in partnership with NASSCOM, is a business-to-consumer (B2C) framework for re-skilling/up-skilling IT professionals in emerging technologies including AI.
- It offers online courses, assessments, certifications, and recognition badges to learners.

Conclusion:

- It is essential that we equip our people with the education, training and support they need to take on the many jobs that will be created.
- We also need to make AI responsible. Government and businesses must work together to develop a code of ethics - tangible standards and best practices to develop and use intelligent machines.
- AI has all the ability to surpass human intelligence and can perform any task much accurately and efficiently. There is also no doubt that AI possesses immense potential which further helps to create a better place to live in. However, anything in excess is not good and nothing can be matched at par with the human brain.
- Therefore, AI should not be used excessively as too much automation and dependent on machines can create a very hazardous environment for the present human mankind and for the next generations to come.

PM PRANAM Scheme- Fertilizer Subsidy

Introduction: -

- The Union Budget for 2023-24 introduced the PM-PRANAM initiative aimed at encouraging the judicious utilization of both chemical and alternative fertilizers. It also seeks to raise awareness about regenerative agriculture (RA).
- Regenerative agriculture is a results-driven approach to food production that prioritizes the rejuvenation and maintenance of soil health, preservation of climate stability, safeguarding of water resources and biodiversity, and the improvement of farms' productivity and economic viability.

What is the PM PRANAM Scheme?

- It stands for **PM Programme for Restoration, Awareness, Nourishment, and Amelioration of Mother Earth.**
- It **aims to** reduce the use of chemical fertilizers and promote the balanced use of alternative fertilizers.
- It will save the subsidy burden on chemical fertilizers, which is projected to increase to Rs 2.25 lakh crore in 2022-2023.
- It will make Indian agriculture more resilient to the changing climate.
- It will incentivise those states that use fewer chemical fertilizers than their average consumption in the last three years.
- The states will receive 50% of the subsidy savings as a grant, which they can use for asset creation, technological adoption, and awareness generation related to alternative fertilizers.
- It will involve the participation of farmers, panchayats, farmer producer organizations and self-help groups that are involved in the reduction of fertilizer use.
- It is in line with the government's focus on promoting green agriculture and sustainable agricultural practices with environmental concern.
- It will support the existing initiatives such as National Mission for Sustainable Agriculture (NMSA), National Initiative on Climate Resilient Agriculture (NICRA), and PM Krishi Sinchaayi Yojna (PMKSY).

Issues with Fertilizer Usage in India: -

Imbalance in Fertilizer Use:

- India has a recommended ratio of 4:2:1 for nitrogen (N), phosphorus (P), and potassium (K) fertilizers, but the actual ratio is much higher for N and lower for P and K. This leads to nutrient deficiencies, soil degradation, and lower crop yields.

- According to a report by NITI Aayog, the average NPK ratio in India was 8:3:1 in 2015-16, which is far from the recommended ratio of 4:2:1.

Excessive Use of Nitrogenous Fertilizers:

- India is the third-largest producer and the second-largest consumer of urea, a nitrogenous fertilizer.
- However, excessive use of urea has negative impacts on soil health, water quality, and greenhouse gas emissions. Urea also subsidizes the production of other fertilizers, which creates distortions in the fertilizer market.

Lack of Domestic Production and Dependence on Imports:

- India has limited domestic resources of P and K fertilizers and relies heavily on imports from other countries.
- This makes India vulnerable to fluctuations in global prices and availability of these fertilizers. Moreover, India has not invested significantly in expanding its domestic fertilizer production capacity since the 1990s.
- According to the annual report of the Department of Fertilizers, India has a domestic production capacity of 24.66 million metric tons of P&K fertilizers, which meets only 50% of the domestic demand.
- The rest is met through imports from countries like China, Russia, Morocco, Jordan, and Saudi Arabia.

Inefficient Distribution and Subsidy System:

- India has a complex and costly system of subsidizing fertilizers to farmers, which involves multiple agencies, intermediaries, and leakages.
- The subsidy system also does not adequately incentivize farmers to use fertilizers efficiently or adopt organic or bio-fertilizers.
- The fertilizer subsidy has become a sticky item in the expenditure list of the Union Budget. The government has earmarked Rs 1.75 trillion for fertilizer subsidy in the 2023-24 Budget, above a trillion rupees for a fourth year in a row.
- The dependence on LNG for fertilizer production exposes India to high and volatile global gas prices, and a soaring fertilizer subsidy bill.
- The use of LNG in the fertilizer sector was as high as 63% of the total gas consumption in FY 2020-21.

Effects of Improper Utilization of Fertilizers: -

Environmental Pollution:

- Excess use of fertilizers causes environmental pollution as their residual and unused amounts will become pollutants for air, water, and soil.
- **Eutrophication:** Excess use of fertilizers can lead to eutrophication in the water bodies, which is the excessive growth of algae and other aquatic plants that deplete the oxygen level and harm aquatic life.

Soil degradation:

- Continuous use of nitrogenous fertilizer alone can reduce the soil fertility and cause deficiencies of other major and micronutrients. It can also affect the soil microflora and fauna that are essential for maintaining the soil quality.

Reduced Crop Quality:

- Improper fertilizer application can result in the excessive growth of certain plant parts (e.g., leaves and stems) at the expense of reproductive structures (e.g., fruits and grains), leading to reduced crop quality and yield.

Groundwater Contamination:

- Nitrate leaching from overused fertilizers can contaminate groundwater, posing health risks to people who rely on these sources for drinking water.
- Elevated nitrate levels in drinking water can lead to methemoglobinemia or "blue baby syndrome."

Health Concerns:

- Pesticides and herbicides often used in conjunction with fertilizers can pose health risks to farmers and consumers when used improperly or excessively.

Economic Burden:

- Excessive fertilizer use can be economically unsustainable for farmers, as it can increase input costs without corresponding increases in crop yields. This can lead to indebtedness among small and marginal farmers.

Greenhouse Gas Emissions:

- The production and application of synthetic fertilizers contribute to greenhouse gas emissions, particularly nitrous oxide (N2O), which is a potent greenhouse gas that contributes to climate change.

Imbalance in Crop Nutrient Uptake:

- Inappropriate fertilizer application can result in an imbalance of nutrients in the soil, which can affect the nutrient uptake by crops and may require corrective actions in subsequent growing seasons.

How can the PM PRANAM Scheme help be reforming the Fertilizer Regime?

Reduction in Subsidy Bills:

- PM Pranam can contribute to reducing the government's subsidy bills by promoting alternative or bio-fertilisers.
- The government aims to set up 10,000 Bio-Input Resource Centres, creating a national-level micro-fertiliser and pesticide manufacturing network.
- By supporting the production and adoption of these bio-fertilisers, PM Pranam can gradually reduce the financial burden on the government in terms of chemical fertilizer subsidies.

Fiscal Deficit Control:

- Lowering subsidy bills through the promotion of PM Pranam can help in controlling India's fiscal deficit. Fiscal deficits can be a significant economic challenge, and reducing subsidies is one way to address this issue.

Gradual Phase-Out of Chemical Fertiliser Subsidies:

- PM Pranam can serve as a catalyst for the gradual phase-out of subsidies on chemical fertilizers.
- By providing support and incentives for the adoption of alternative fertilizers, the government can reduce its financial commitment to chemical fertilizer subsidies.

Support for Farmer Fertiliser Cooperatives:

- PM Pranam can help farmer fertilizer cooperatives scale up their production of biofertilizers. This support can lead to increased economies of scale and a more extensive distribution network for alternative fertilizers.

Incentivizing Sales and Distribution Networks:

- It's important to work out pricing and margin strategies for biofertilizers to incentivize sales and distribution networks.
- PM Pranam can facilitate this by providing incentives to cooperatives and businesses involved in biofertilizer production and distribution.

Demonstration and Certification:

- PM Pranam can support initiatives to demonstrate the effectiveness of alternative fertilizers on farmer fields.
- Certification of these bio-fertilisers can also ensure quality and help farmers or their organizations realize better prices for their produce.

Other Governments Initiatives: -

One Nation One Fertilizer (ONOF):

- This scheme, also known as *Pradhan Mantri Bhartiya Jan Urvarak Pariyojana (PMBJP), was launched in 2022 by the Ministry of Chemicals and Fertilizers.*
- Under this scheme, all fertilizer manufacturers under the fertilizer subsidy scheme are required to use a single brand and logo for fertilizers. The brand name is Bharat and it covers all types of fertilizers, including urea, DAP, NPK, and MOP.
- The aim of this scheme is to standardize fertilizer brands across the country, clear up the confusion of farmers regarding the availability and quality of fertilizers, reduce the cost and increase the availability of fertilizers, and save freight subsidy by minimizing cross-country movement of fertilizers.

Direct Benefit Transfer (DBT):

- This system was introduced in 2016 by the Department of Fertilizers to provide subsidy amount to farmers to purchase fertilizers.
- Under this system, the subsidy is transferred to the fertilizer companies after the sale is made to the farmers through point of sale (PoS) devices installed at retail outlets.
- The aim of this system is to ensure timely supply of fertilizers, prevent diversion and leakages of subsidy, promote balanced use of fertilizers, and create a transparent and accountable system for subsidy payments.

Nutrient Based Subsidy (NBS):

- This scheme was launched in 2010 by the Department of Fertilizers to provide subsidy on nutrients rather than on products.
- Under this scheme, the subsidy rates for nutrients such as nitrogen (N), phosphorus (P), potassium (K), and sulphur (S) are fixed by the government in advance for each financial year.
- The manufacturers and importers are free to decide the retail price of their products based on the market conditions.
- The aim of this scheme is to encourage the production and consumption of complex fertilizers, promote balanced use of NPKS nutrients, reduce the subsidy burden on the government, and induce competition among fertilizer companies.

Neem Coated Urea (NCU):

- This scheme was launched by the government in 2015 to promote the use of organic urea to preserve soil health and yield better crops.
- Under this scheme, farmers are only making use of neem coated organic urea to cut down savings by around 10%. The urea that is coated with neem tree seed oil is called neem coated urea.
- The government mandated all the indigenous and imported urea to be neem coated to make the urea slow release and difficult to use for non-agricultural purposes.
- The scheme aims to regulate the use of urea, enhance the availability of nitrogen to the crop, reduce the cost of fertilizer application, prevent wastage and diversion of subsidy, and decrease soil and water pollution caused by urea.

Conclusion: -

- Fertilizer subsidy is third highest in India and with PM PRANAM Scheme it will get reduce and we can use this in another capacity building sector and at the same time it will help us to solve the problem of environmental degradation in long term.

Question for practice: -

- The fertilizer subsidy system in India requires restructuring. Explain how the newly introduced PM-PRANAM (PM Programme for Restoration, Awareness, Nourishment, and Amelioration of Mother Earth) Scheme can contribute to this reform.(250W)

GS 4

Science Without Humanity

Why in News?

- Use of deadly weapons in the Russia-Ukraine war despite knowledge of negative repercussions on human lives.
- A researcher in China used gene editing techniques to create a designer baby (children with desired characteristics).
- Artificial technology and related disruptive technologies are progressing quickly without considering their consequences, such as privacy violations (human dignity).

Introduction: -

- **Science without humanity is one of the seven deadly sins propounded by Mahatma Gandhiji.**
- He maintained that if science is solely cantered on technique and technology, it swiftly transforms into a force pitted against humanity. Gandhi underscored the importance of directing our attention towards loftier human objectives that technology should endeavour to fulfil.

Ethical concerns in Science without Humanity: -

Human being as means:

- Often, science uses human beings as a means which violates human dignity and fundamental human rights.
- For Example, in some surrogacy cases, financially vulnerable women are exploited.

Illicit use of technology:

- Public trust is eroded when scientific development or methodologies are hidden or manipulated for personal gain or to support a specific agenda.
- **Example**- Facebook's case of data selling in USA

Limited accountability:

- Lack of precise accountability mechanisms and systems to check the development of potentially destructive technologies.
- E.g., the development of chemical or biological weapons by some countries.

Cultural Insensitivity:

- A lack of consideration for cultural differences and norms can result in imposing scientific practices that clash with societal values.

Unequitable distribution of benefits:

- The direction of scientific development is often driven by issues of more well-off sections of society.
- **For instance**, many common problems poorer sections of society face do not receive their due weight, such as manual scavenging, malnutrition, etc.

Unintended Consequences:

- Pursuing scientific advancements without ethical considerations can result in unforeseen negative consequences for society and the environment.

Way Forward: -

Ethical Impact Assessments:

- Introduce ethical impact assessments alongside traditional risk assessments for projects involving potentially sensitive technologies.

Interdisciplinary Collaboration:

- Encourage collaboration between scientists, ethicists, social scientists, and other stakeholders to ensure that ethical considerations are integrated into research and innovation.

Part of the education system:

- Emphasizing Moral education, i.e., focus on principles and values and scientific knowledge, needs to be promoted.

Social Impact Indicators:

- Common social impact indicators can be developed for technological developments. This will indirectly nudge the scientists and technocrats towards a more welfarist direction.

Whistleblower Protection:

- Implement mechanisms to protect individuals who raise ethical concerns within the scientific community, promoting accountability.

Corporate Responsibility:

- Encourage corporations and industry players to adopt ethical guidelines in their research and development activities.

Conclusion: -

- *Humanity without science is fragile, science without humanity is lethal.*
- "In front of the radioactivity of mind, Radioactivity of matter turns dim.
- **If Science is vehicle than spirituality and ethics is driving it so concerted endeavour safeguards against the erosion of humanity in the pursuit of knowledge, ensuring that science remains not just a beacon of progress, but a torchbearer of ethical enlightenment.**

QR Code of Lectures

August First Week

August Second Week

August 3rd and 4th Week

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