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— Disclaimer —

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

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

CURRENT AFFAIRS WEEKLY

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WEEK - 4 (NOVEMBER, 2022)

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SECTION: A
(MAINS)

CURRENT AFFAIRS

INDIA SHOULD TAKE ITS CHILD LABOUR PROBLEM SERIOUSLY

CONTEXT:

According to a British newspaper, a child labour warning has been issued by trade unions over the India-UK trade deal which got overlooked in India.

What is Child Labour?

Child labour statistics for India:

- Every **1 in 10** child labourers worldwide is from India.
- Girls are the most affected.
- Child labour is most prevalent in five regions (*census 2011)* namely, **Bihar, Uttar Pradesh, Rajasthan, Madhya Pradesh and Maharashtra.**

Child labour refers to the employment of children in any work that deprives them of their childhood, interferes with their ability to attend regular school, and is mentally, physically, socially or morally dangerous and harmful.

Where are these child labourers deployed?

- Bonded labour, child soldiers, and trafficking.
- **Industrial labour**: In brick kilns, carpet weaving, garment making, domestic service, food and refreshment services (such as tea stalls), agriculture, fisheries and mining.
- Sexual exploitation
- In Child pornography
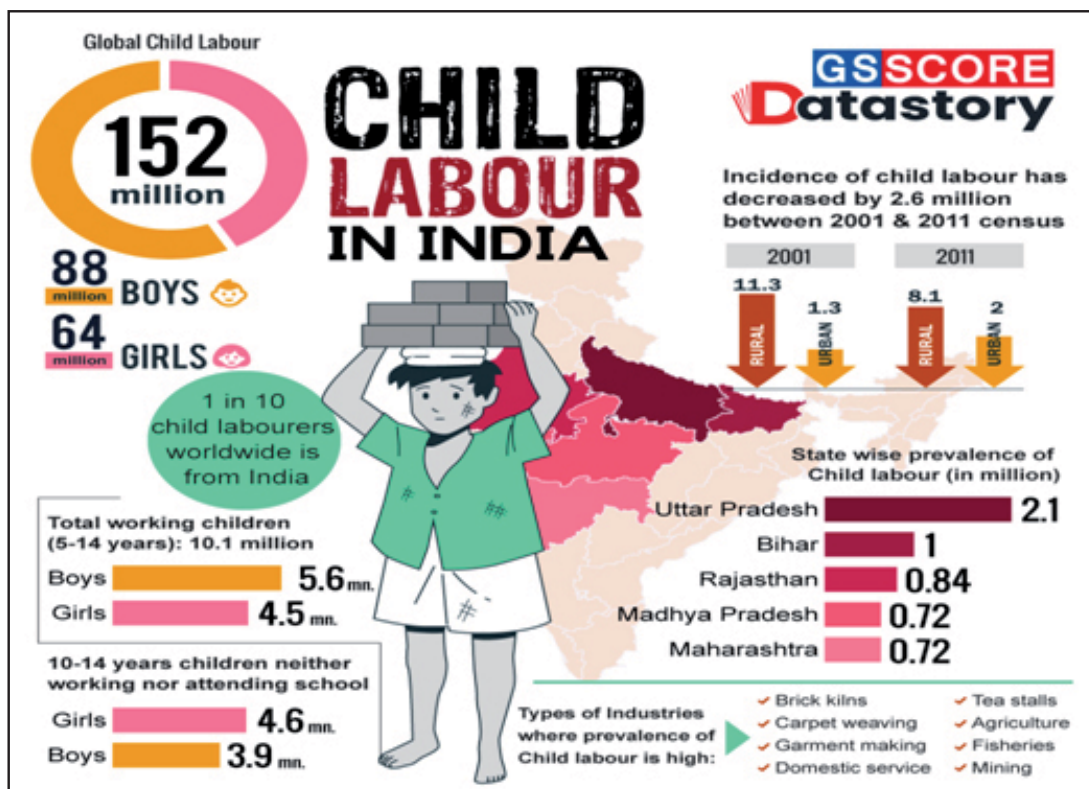
Factors responsible for Child labour	Consequences associated
• Poverty • Social norms condoning them • Lack of decent work opportunities for adults and adolescents, • Migration and emergencies	• Risks of contracting occupational diseases like skin diseases, diseases of the lungs, weak eyesight, TB etc. • Vulnerability to sexual exploitation at the workplace • Deprived of education. • Threat to National Economy • Child labour in the informal sector • Disguised child labour

Policy interventions against Child labour in India:

◉ **Child Labour Act (Prohibition and Regulation) 1986**: It prohibits children under the **age of 14 years** to be working in hazardous industries and processes.

◉ **Child Labour (Prohibition & Regulation) Amendment Act 2016**: It prohibits the employment of children **below 14 years** in all employment and with the provisions for the prohibition on employment of **adolescents (14-18 Years)** in scheduled hazardous occupations and processes.

◉ The **Child Labour (Prohibition & Regulation) Amendment Rules, 2017:** The Rules provide a broad and specific framework for the prevention, prohibition, rescue and rehabilitation of child and adolescent workers.

◉ It also clarifies on issues related to helping in family and family enterprises and the definition of family with respect to children, specific provisions have been incorporated into rules.

◉ Policy interventions such as **MGNREGA 2005** and **Right to Education Act 2009** and **Mid-Day Meal Scheme** have paved the way for children to be in schools along with guaranteed wage employment (unskilled) for rural families.

Constitutional Provisions for Child Upliftment:

• **Article 21 A: 'Right to Education':** The State shall provide free and compulsory education to all children of the **age of 6 to 14 years** in such manner as the State, by law, may determine.

• **Article 24:** Prohibition of employment of children in factories

• No child below the age of fourteen years shall be employed in work in any factory or mine or engaged in any other hazardous employment.

• **Article 39**: The State shall, in particular, direct its policy towards securing, that the health and strength of workers, men and women, and the tender age of children are not abused and that citizens are not forced by economic necessity to enter avocations unsuited to their age or strength.

Suggestive measures:

◉ **Survey of child labour:** It is necessary that the government commissions research and surveys on different aspects of child labour in the country.

◉ **New Policy for Child Labour:** A lot of changes have been done since the child labour policy in 1986. But a further relook of all the laws and policies is urgently needed. Consistency in the constitutional and legal provisions pertaining to children's rights is critical and required**.**

◉ **National Child Labour Programme (NCLP):** The current National Child Labour Programme (NCLP) needs to be revamped.

◉ **Social Mobilisation**: Given that eradication of child labour is not an easy task, preventive strategies are more sustainable in the long run. The role of social mobilization and community participation is crucial.

◉ **Role of Panchayats**: The panchayats can play a significant role in mitigating in child labour.

➤ Generate awareness about the ill effects of child labour

➤ **Encourage parents** to send their children to school

➤ Create an environment where **children stop working** and get enrolled in schools instead

➤ Ensure that children have **sufficient facilities available** in schools

➤ Inform industry owners about the **laws prohibiting child labour** and the penalties for violating these laws

➤ Activate **Balwadis and Aanganwadis** in the village so that working mothers do not leave the responsibility of younger children to their older siblings

SURVEILLANCE ARCHITECTURE IN INDIA VIOLATING PRIVACY OF INDIVIDUALS

CONTEXT:

The reworked Digital Personal Data Protection Bill 2022 has been released for public comments. It is focused on personal data, as compared to an earlier unwieldy draft.

◉ BACKGROUND

◉ The journey towards demands for **data protection legislation** began in 2011 when the **Department of Personnel and Training** initiated discussions on the **Right to Privacy Bill, 2011.**

> **Right to Privacy Bill, 2011:**
> - It creates a statutory **Right to Privacy** by means of a broad definition and then creates specific protections for it.
> - The **government interception and telephone tapping** mechanism is changed moderately from the existing system.
> - A **regulatory mechanism** is created through the **Data Protection Authority of India**.

Important provisions of the Bill 2022:

◉ The Bill aims to secure **personal data**, while also seeking **users' consent** in what the draft claims is "clear and plain language" describing the exact kinds of information that will be collected and for what purpose.

◉ The Bill will establish the comprehensive legal framework governing digital personal data protection in India.

◉ **Applicability** - Limited to the processing of only 'digital personal data'.

◉ **Data Protection Board** – Provides for establishment of a data protection board which will act as an independent body and exercise supervisory functions.

◉ **Cross border flow**: It allows for cross border data flow to "countries and territories" notified by the Central government.

Issues with the new Bill:

◉ **Blanket exemption: Clause 18(2);** of the bill allows the Union government to provide blanket exemptions for selected government agencies.

➤ However, the Bill also permits exemption to **private sector entities** that may include **individual companies or a class of them**, by assessing the volume and nature of personal data under **Clause 18(3).**

◉ **Amendment to RTI Act**: The DP Bill proposes to amend the Section 8.1(j) of the Right to Information Act, 2005 in a manner that disclosure of personal information may be absolutely denied to a RTI applicant (irrespective of it being in larger public interest).

Need of the Bill:

◉ India has over 760 million active internet users, necessitating that data generated and used by online platforms are subject to privacy rules to prevent abuse and increase accountability and trust.

Laws in other geographies:

- An estimated **137 out of 194 countries** have put in place legislation to secure the protection of data and privacy, with **Africa and Asia showing 61%** (33 countries out of 54) and 57% adoption respectively.
- Only 48% of **Least Developed Countries** (22 out of 46) have data protection and privacy laws

Important technological breakthrough in India's digital journey

- In 2009, the **National Payments Corporation of India** took over the ATM network to modernise retail payments and settlements.
- Establishment of the Unique Identification Authority of India or UIDAI.
- With the Aadhaar program in place, India implemented Pradhan Mantri Jan Dhan Yojana to provide all households in India with a bank account.

The Foreign National Act of 1946:

- **Power to make orders against Foreign nationals:** According to the Act, **the Central Government** may by order make provisions, either generally or with respect to **all foreigner**s or with respect to any particular foreigner or any prescribed class or description of a foreigner, **for prohibiting, regulating or restricting the entry of foreigners into [India] or, their departure therefrom or their presence or continued presence** therein.
- **Protection to persons acting under this Act:** No suit prosecution or other legal proceeding shall **lie against any person** for anything which is in good faith done or intended to be done under this Act.

REVIEW PETITION BY CENTRE ON THE SUPREME COURT'S JUDGEMENT

CONTEXT:

The Centre moved to Supreme Court (SC), seeking a review of the court's order for granting remission to the convicts of the Rajiv Gandhi assassination case.

- They argued that the judgement was passed without seeking the Centre's suggestions.

⊙ ABOUT:

What was the Centre's argument against the Supreme Court's Orders?

- **Union of India as a main party to the issue**: The government mentioned that the convicts who sought remission did not make the Union of India a respondent in their plea '**despite it being a necessary party'** to the issue.

- **Conflict of Powers between the Centre and Supreme Court**: The majority of the appellants were **foreign nationals** and the government's role was a must.

  - According to the Centre, granting **remission to the terrorist of a foreign nation**, who had been duly convicted in accordance with the law of land for the gruesome offence of assassinating the former Prime Minister of the country is unjust.
  - It is a matter which has international ramifications and therefore falls squarely within the '**sovereign powers of the Union of India'.**

- **Leading to a patent error in the Orders by SC**: Also, non-presentation of such crucial facts, going into the root of the matter has resulted in '**patent and a manifest error'** apparent on the face of record creeping into the final judgment passed and is a miscarriage of justice.

Can the Supreme Court's Order/Judgment be reverted?

- **According to the Constitution**, any ruling by the Supreme Court is in the normal course final and binding, and it becomes the **law of the land.** It is considered final because it provides certainty for deciding future cases.

- However, Under **Article 137,** the Supreme Court has the **power to review its judgments**. This provision forms the legal basis for the filing of a **"review petition"**.

What is the procedure for filing a review petition?

> It is the sole decision of the Supreme Court itself to hear its judgement.

- A review petition must be filed **within 30 days** of the pronouncement of the judgment.

- Except in **cases of the death penalty**, review petitions are heard through circulation by judges in their chambers. They are usually not heard in **open court**.

- Lawyers in review petitions usually make their case through **written submissions**, and not oral arguments.

- The **same judges** who passed the original verdict usually also hear the **review petition.**

Criteria by SC's for review petition:

- **In a 1975 ruling**, **Justice Krishna Iyer** said a review can be accepted only where;
  - ➤ **A glaring omission or**
  - ➤ **Patent mistake or**
  - ➤ **A grave error** has crept in earlier by judicial fallibility.

- **In a 2013 ruling,** the Supreme Court laid down **three grounds** for seeking a review of a verdict it has delivered:
  - ➤ The discovery of new and important matter or evidence which, after the exercise of due diligence, was not within the knowledge of the petitioner or could not be produced by him;
  - ➤ A mistake or error apparent on the face of the record; or
  - ➤ Any other sufficient reason. In subsequent rulings, the court specified that "any sufficient reason" means a reason that is analogous to the other two grounds.

WEIGHING ON PM-GKAY SCHEME

CONTEXT:

The Central government had announced an extension of the Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY) for another three months until December 2022.

⊙ ABOUT

The PMGK Anna Yojana:

- The **Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY)** is a free food grain scheme introduced in March 2020.

- **Objective:** To alleviate Covid distress.

- The scheme is part of **Atmanirbhar Bharat** to supply free food grains to **migrants and the poor**.

- **Benefits allocated:**
  - ➤ PMGKAY beneficiaries get a **5kg free ration per person per month** in addition to their normal quota of food grains under the **National Food Security Act**.
  - ➤ Under NFSA, highly subsidised food grains are provided to **about 75% rural** and **50% urban** population of the country.

- ◉ **Eligibility:**
  - ➤ Families belonging to the Below Poverty Line - Antyodaya Anna Yojana (AAY) and Priority Households (PHH) categories will be eligible for the scheme.
  - ➤ AAY families are to be identified by States/UTs as per the criteria prescribed by the **Central Government.**
  - ➤ Households headed by widows or terminally ill persons or disabled persons or persons aged 60 years or more with no assured means of subsistence or societal support.
  - ➤ All **primitive tribal**
  - ➤ Landless agriculture labourers, marginal farmers, rural artisans/craftsmen such as potters, tanners, weavers, blacksmiths, carpenters, slum dwellers, and persons earning their livelihood on daily basis in the informal sector are included under the scheme.

Is it required to further extend the scheme?

According to the studies, there is no such need to extend the scheme due to the following reasons:

- ◉ **Overlap with other poverty alleviation schemes like;**
  - ➤ **The Public Distribution System (PDS)**: Under the PDS, presently the commodities namely **wheat, rice, sugar and kerosene** are being allocated to the States/UTs for distribution.
  - ➤ Some States/UTs also distribute additional items of mass consumption through the PDS outlets such as pulses, edible oils, iodized salt, spices, etc.
  - ➤ **Antyodaya Anna Yojana (AAY):** Provide them grains at a highly subsidised rate of Rs.2 per kg for wheat and **Rs.3 per kg** for rice and **Re. 1 for coarse grains**.
  - ➤ The chosen households are entitled to **35kg** of food grains per month.

> **Regulatory Bodies involved:**
> - Public Food Distribution System in States
> - Ministry of Health and Family Welfare
> - Ministry of Finance

- ◉ **Can lead to Corruption:** As already many schemes are going on in States and by the Centre, the fund allocated for PM-GKAY may be misused and lead to corruption
- ◉ **Inadequate data representation:** Due to a lack of proper surveys after the implementation of schemes, outdated data can lead to misguiding governments' revenue and sources.

SC MIGHT RECONSIDER JUDGMENT PROTECTING MPS/ MLAS WHO TAKE CASH FOR VOTES

CONTEXT:

A five-judge Constitution Bench of the Supreme Court is going to review its decision in the 'JMM bribery scandal', 1998 in which the lawmakers claim immunity from criminal prosecution for taking bribes in connection with a speech or vote in Parliament or a state assembly.

◉ BACKGROUND:

- ◉ In 1998, **a five-judge Constitution Bench** of the Supreme Court ruled that parliamentarians were afforded immunity from criminal prosecution for taking bribes in connection with a **speech or vote in Parliament** or **a state assembly** under Article 105 of the Constitution.
- ◉ In **a 3:2 ruling**, the Constitution Bench held that *Article 105* protects a member of Parliament against proceedings in court that relate to, or concern, or have a connection or nexus with anything said, or a vote given, by him in Parliament.

> **Article 105** of the Constitution provides for the **powers and privileges of the Houses of Parliament**, their members and committees. It states that; *'No member of Parliament shall be liable to any proceedings in any court in respect of anything said or any vote given by him in Parliament or any committee thereof*.

What are the Parliamentary Privileges?

◉ They are special rights, immunities and exemptions enjoyed by the two **Houses of Parliament, their committees and their members**.

◉ Under these privileges, the members of Parliament are exempted from any civil **liability (but not criminal liability)** for any statement made or act done in the course of their duties.

> ➤ The privileges are claimed only when the person is a member of the house.

> ➤ As soon as s/he ends to be a member, the privileges are said to be called off.

◉ **Parliament has not made any special law** to exhaustively codify all the privileges. They are **rather based on five sources:**

> ➤ Constitutional provisions

> ➤ Various laws made by Parliament

> ➤ Rules of both the Houses

> ➤ Parliamentary conventions

> ➤ Judicial interpretations

Privileges mentioned are:

◉ **Freedom of Speech in Parliament:**

> ➤ The freedom of speech and expression guaranteed to a citizen under **Article 19(2)** is different from the freedom of speech and expression provided to a member of the parliament.

> ➤ It has been guaranteed under **Article 105(1)** of the Indian constitution.

> ➤ But the freedom is subject to rules and orders which regulate the proceedings of the parliament.

> ➤ **Limitations:**

> > • Freedom of speech should be in accordance with the constitutional provisions and subject to rules and procedures of the parliament, as **stated under Article 118 of the Constitution.**

> > • Under **Article 121 of the Constitution,** the members of the parliament are restricted from discussing the conduct of the judges of the **Supreme Court** and the High Court.

◉ **Freedom from Arrest:**

> ➤ The members enjoy freedom from arrest in any **civil case 40 days before and after the adjournment of the house and also when the house is in session.**

> ➤ **No member can be arrested from the limits of the parliament without the permission of the house** to which s/he belongs so that there is no hindrance in performing their duties.

> ➤ If the detention of any members of the parliament is made, **the chairman or the speaker should be informed by the concerned authority, of the reason for the arrest.**

> But a member can be arrested outside the limits of the house on criminal charges against him under the **Preventive Detention act**, **the Essential Services Maintenance Act (ESMA), the National Security Act (NSA), or any such act.**

◉ **Right to Prohibit the Publication of Proceedings:**

> ➤ **Article 105(2)** of the Constitution, **no person shall be held liable for publishing any reports, discussions etc. of the house under the authority of the member of the house.**

> > • For paramount and national importance, the proceedings must be communicated to the public to aware them of what is going on in the parliament.

◉ **Right to Exclude Strangers:**

◉ The members of the house have the **power and right to exclude strangers** who are not members of the house from the proceedings. This right is very **essential for securing free and fair discussion** in the house.

Laws governing acts of Corruption in India:

The call of action against the act of bribery or corruption can be taken under:

• Crime Branch of India (CBI)

• The Prevention of Corruption Act

• Section 120B (Criminal Conspiracy) of IPC

UNION HEALTH MINISTRY ROLLS OUT COUNTRY'S FIRST SUICIDE PREVENTION POLICY

CONTEXT:

The Ministry of Health and Family Welfare has announced a National Suicide Prevention Strategy, the first of its kind in the country to achieve a reduction in suicide mortality by 10% by 2030.

⊙ ABOUT

The National Suicide Prevention Strategy:

- The strategy is in line with the **WHO's South East-Asia Region Strategy** for suicide prevention.
- **Aim:** The strategy broadly seeks to establish:
  - ➤ Effective surveillance mechanisms for suicide within the next three years.
  - ➤ To establish **psychiatric outpatient departments** that will provide suicide prevention services through the District Mental Health Programme in all districts within the next five years, and
  - ➤ To integrate a mental well-being curriculum in all educational institutions within the next eight years.
- **It envisages developing guidelines for:**
  - ➤ responsible media reporting of suicides, and
  - ➤ restricting access to means of suicide with time-bound action plans and
  - ➤ multi-sectoral collaborations.
- The stress is on **developing community resilience** and **societal support** for suicide prevention.

The South East-Asia Region Strategy:

- Strengthen advocacy, effective leadership and governance for the prevention of suicides.
- To provide comprehensive, integrated and responsive mental health and social care services in community-based settings to address suicides.
- To implement strategies for the promotion of mental, social and physical health and well-being aimed at preventing suicides
- To strengthen information systems, evidence and research on suicide

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Suicide rates in India:

- According to the **National Crime Records Bureau (NCRB) report 2021,** the Suicide rate in India is increasing alarmingly.
- Delhi has recorded the highest number of (**2,840) suicides.**
- **Reasons for Suicide:**
  - ➤ 33.2%: Family Problems (other than marriage-related problems)
  - ➤ 4.8%: Marriage Related Problems
  - ➤ 18.6%: Illness
- **Daily wage earners** accounted for 42,004 (25.6 per cent) of the total victims. One in four of the recorded 1, 64,033 suicide victims during 2021 was a daily wage earner.
- They were followed by *self-employed people, unemployed people*, and those involved in the *farming sector* were the top categories of people who died by suicide in 2021.
- The report certainly points out suicides as a critical public health issue in India and qualifies for a closer epidemiological assessment.

Total suicide reported in

2019
139123 ↑ 3.4%

2018
134392

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SUICIDES IN INDIA
NCRB REPORT

State wise data

Maharashtra
18916 13.6%

Tamil Nadu
13493 9.7%

West Bengal
12665 9.1%

Madhya Pradesh
12457 9%

Karnataka
11288 8.1%

5 states together accounted for **49.5%** of total reported cases

Causes of Suicide

32.4% Family problems

17.1% Illnes

5.6% Drug abuse/ addiction

5.5% Marriage related issues

4.5% Love affairs

4.2% Bankruptcy or Indebtedness

2% Failure in Exam

2% Unemployment

1.2% Professional/ career problems

1.1% Property dispute

Male suicide
29092 Daily wage earners
14319 self-employed
11599 Unemployed Person

Female suicide
21359 House wives
4772 Students
3467 Daily wage earners

Economic Status of suicide victims
66.2% Victims had Annual Income < 1 lakh
29.6% Victims had Annual Income 1-5 lakh

Educational status of suicide victims

Matriculation/secondary level: **23.3% (highest)**   Higher secondary level: **14%**
Middle level educated: **19.6%**   Illiterate: **12.6%**
Primary level educated: **16.3%**   Graduates and above: **3.7% (lowest)**

How is Suicide a Social Problem?

◉ Suicide is a **serious social problem** whose incidence varies between genders, age groups, geographical distribution, and the influence of the socio-political structure of society.

◉ Furthermore, suicide should be viewed as a multidimensional public and mental health issue, having complex interactions with the economic, social, cultural, psychological, and biological realms of individual and collective existence.

Related Initiatives:

• Mental Healthcare Act, 2017
• KIRAN
• Manodarpan Initiative

What are the challenges?

◉ **Under-reporting of such cases** due to fear of social stigma and sometimes to rescue from judicial procedures.

◉ **Fear of legal action**: **Section 309** of the Indian Penal Code (IPC) makes The fear of punitive action and added hassle of having to deal with police and courts often '**Suicide a punishable offence',** results in a refusal to seek help.

◉ **Social stigma:** The social stigma associated with suicide results in the NCRB grossly under-reporting the true numbers of suicide.

PAPERLESS 'SAHARSA' IS BIHAR'S NEW SHOWCASE DISTRICT

CONTEXT:

Recently, Saharsa became the first district in Bihar to be declared paperless with an aim to end the Great Indian Red Tape.

◉ ABOUT

What is Red Tape?

◉ Red tape is a derisive term for **excessive regulation or rigid conformity** to formal rules that is considered **redundant or bureaucratic** and hinders or prevents action or decision-making.

◉ **It generally includes**:
  ➤ Filling out seemingly **unnecessary paperwork**,
  ➤ Obtaining **unnecessary licenses**,
  ➤ Having **multiple people or committees** approve a decision and
  ➤ Various **low-level rules** make conducting one's affairs **slower** and **more difficult**.

A step towards Good Governance:

◉ The **e-office initiative** goes back to 2009 but the towering piles of paperwork were still a hurdle too high to cross.

◉ **Idukki in Kerala** became paperless in 2012 **and Hyderabad in 2016.**

◉ The Covid pandemic gave an impetus to the initiative with many district administrations taking the digital route in 2020 and 2021 including Palakkad in Kerala, Jagatsinghpur in Odisha, Gwalior in Madhya Pradesh and Raigarh in Maharashtra.

◉ A **Cooperative Department** in Patna working paperless was Bihar's first government department to make the digital transition in 2020.

◉ SIGNIFICANCE:

◉ Digitisation has helped bring about **efficiency, transparency and accountability.**

◉ It has increased employee productivity. And the number of people required to process a single file has reduced.

◉ The online system has also brought in more **accountability**. Staff members cannot sit on files for days on end.

◉ Technology is his first step towards good governance and a corruption-free system.

How Red Tapism hinders Good governance?

◉ **Affects Citizen Satisfaction:** Red tape indeed negatively affects citizen satisfaction due to delayed government processing and the cost associated with it.

◉ **Hinders Scheme implementation:** Delayed release of funds, lack of proper monitoring etc. are commonly associated issues attached to Red Tapism that make policies ineffective.

- **Leads to Corruption:** The higher the level of red Tapism, the higher the level of corruption.

- **Increases cost of doing business:** Red tape is costly, not just in time and money spent filling out forms but also in terms of reduced productivity and innovation in business.

- **Delay Justice and service delivery:** Due to Red Tapism variable enforcement of contracts and delayed administration lead to delayed justice, especially for the poor.

  ➤ **For example**, delayed wage payments under MGNREGA impact timely benefits to the poor.

Suggestive Measures:

- **Skill development:** Some officials are not skilled enough to make government processing faster. It is important to train them properly on the subjects and appoint skilled people.

- **Incentives:** A lot of government employees at the lower level (Group C and Group D) are underpaid. They find no incentive to work efficiently. Efforts must be made to honour workers for their good work and punishing for not achieving timely efficiency.

- **Providing adequate Infrastructure:** Due to the lack of Computers and Technology in Rural areas, the government offices were left with no option but to work manually. This must be addressed at the earliest.

INDIA-AUSTRALIA TRADE AGREEMENT

CONTEXT:

The Australian Parliament has ratified the Economic Cooperation and Trade Agreement (ECTA) with India. This pact has been seen as an opportunity for growing Indian Businesses.

◉ BACKGROUND:

- In September 2021, Australia and India formally re-launched CECA negotiations with the intention of concluding an Economic Cooperation and Trade Agreement (AI-ECTA).

- It aims to swiftly liberalise and deepen bilateral trade in goods and services, and to then use this foundation to resume negotiations on the more ambitious CECA.

◉ ABOUT:

The India-Australia ECTA:

- It covers almost all the tariff lines dealt in by India and Australia.

> **Tariff Lines:** It is a product as defined in lists of tariff rates. A specific tariff is a tax imposed directly onto one imported good and does not depend on the value of that imported good. A specific tariff is usually based on the weight or number of imported goods.

- India will benefit from preferential market access provided by Australia on 100% of its tariff lines.

- India will be offering preferential access to Australia on over **70% of its tariff lines**.

- Under the agreement, Indian graduates from STEM (Science, Technology, Engineering and Mathematics) will be granted **extended post-study work visas.**

- It will provide **zero-duty access to 96% of India's exports** to Australia and will give about 85% of Australia's exports zero-duty access to the Indian market

- It will boost bilateral **trade in goods and services** to USD 45-50 billion over five years, up from around USD 27 billion, and generate over one million jobs in India, according to a government estimate.

◎ SIGNIFICANCE:

- ◎ **Enhanced Exports**: Currently, Indian exports face a tariff disadvantage **of 4-5%** in many labour-intensive sectors vis-à-vis competitors in the Australian market such as **China, Thailand, Vietnam, South Korea, Japan, Indonesia and Malaysia.**
  - ➤ Removing these barriers under the ECTA can enhance India's merchandise exports significantly.
- ◎ **Cheaper Raw Materials:** Australian exports to India are more concentrated in raw materials and intermediate products.
  - ➤ Due to zero-duty access to 85% of Australian products, many industries in India will get cheaper raw materials and thus become more competitive, particularly in sectors like steel, aluminium, power, engineering and so on.
- ◎ **Change in Perceptions for India**: It will help to change perceptions of developed countries towards India as 'protectionist' and address scepticism around India's openness to do business with the world.

Impacts on India:

- ◎ **Global supply chains get strengthened**: India's rationale for signing a comprehensive economic agreement with these countries is to be part of the **global value chains (GVCs),** both, trade and foreign investment is central to GVCs.
- ◎ **Stronger Indo-Pacific:** Strong Australia India economic ties will also pave the way for a stronger Indo-Pacific economic architecture.

INDIA'S UNORGANIZED SECTOR IS BEING ENGULFED

CONTEXT:

The disjuncture between the growth of the corporate sector and declining businesses in the unorganized sector presents the stark reality which is engulfing India's unorganized sector.

Difference Between Organized and unorganized Sector:

Organized Sector	Unorganized Sector
It is a sector where the employment terms are fixed and regular, and the employees get assured work.	The unorganized sector is characterized by small and scattered units, which are largely outside the control of the government.
The job is regular and has fixed working hours. If people work more, they get paid for overtime by the employer.	Jobs are low-paid and often not regular.
Workers enjoy the security of employment.	Employment is not secure. People can be asked to leave without any reason.
Examples: Government employees, registered industrial workers, etc.	Examples: Shopkeeping, Farming, Domestic work, etc.

Some statistics:

- ◎ **Boom in corporate sector (RBI Data):**
  - ➤ Sales of companies surged 41% and net profits increased by 24% over the last year.The corporate sector surge far exceeds the growth of the economy.
  - ➤ If one component of the economy is rising so rapidly, the other part, the non-corporate sector in the industry, must be shrinking.

> **Unorganized/Informal sector in India**
> - Around 80% of India's labour force is employed in the informal sector and the remaining 20% is in the formal sector.
> - Of the 80% informal sector workforce, half work in agriculture and the remaining in non-agricultural sectors.

Are all the sectors 'really' doing well? (Government Argument)

- **Tax revenue has grown 52.3%:** The tax collection has been robust, so the economy is doing well.

- **Reality:** But we must understand that this does not reflect the unorganized sector where most incomes are below the taxable limits and which is exempt from the **Goods and Services Tax.**

- The government has been pushing for **digitisation and formalisation** of the economy to
  - ➤ curb tax evasion
  - ➤ provide better services to the marginalised

- But the unorganised sector cannot cope with these changes which increase their costs, compared to the organised sector which is already largely digitised and formalised.

- No wonder, demand has been shifting from the unorganised and small units to the larger ones, spurring their rapid growth.

- This is also true of those units that are suppliers to the larger ones.

Does the entire unorganized sector is declining?

- The answer is NO. But there are numerous issues:
  - ➤ Some units are suppliers to the small and medium sector units which in turn are suppliers to the corporate sector.
  - ➤ The growth of the corporate sector has benefited these units.
  - ➤ But many times, these payments are delayed by the larger units.

What are the issues?

- **Bearing the cost:** The unorganized sector cannot cope with changes that increase its costs. On the contrary, the organized sector is already largely digitized and formalized.
  - ➤ It has gradually shifted the demand from unorganized and small units to larger ones, spurring their rapid growth.

- **Colonization of the unorganized sector:** Although the GST was designed to formalize the economy, in many cases, the market of the unorganized sector is being captured by the organized sector.

- **Digitization and formalization:** The government argues that Digitization and formalization can improve businesses.
  - ➤ curb tax evasion and more taxes will be collected
  - ➤ better services can be provided to the marginalized.

- **Growing Divide:** A Survey of incomes by PRICE released at the start of this year shows the growing divide between the top 20% and the bottom 60% in the income ladder.

Concerns:

- **The unorganized sector isn't prepared**: The GST, digitization, and formalization are setting the rules of the gains in favour of the organized sector at the expense of the unorganized sector.

- **Capturing the Markets**: As the production of the unorganized sector declines, the produce of the organized sector finds new markets for its expansion.

- **Data Availability**: Unorganized sector is ignored in data; policies also ignore it even though it employs 94% of the workers and produces 45% of the output.

Need to be done:

- **More inclusive Approach:** Schemes like MUDRA loans and Start-up India are helping the youth carve a niche in the organized sector.

- **Simpler regulatory framework**: The transition can only occur when the informal sector is given relief from the burden of regulatory compliance.

- **Financial Support for Formalization:** Giving financial support to help small-scale industries stand on their own is a crucial step in bringing them to the organized sector.

CENTRE TAKING PROACTIVE MEASURES FOR 'CRITICAL MINERAL SECURITY'

CONTEXT:

In a bid to strengthen the critical mineral supply chain for emerging technologies, the government is taking several proactive measures.

◉ BACKGROUND:

- India has the world's **fifth-largest reserves** of critical minerals/elements, nearly twice as much as Australia, but it imports most of its rare earth needs in finished form from China.

- Many of these critical minerals are mined in Australia, China, the Democratic Republic of Congo, and South America, and much of the processing of these minerals takes place in China.

- In 2019, the US imported 80% of its rare earth minerals from China while the European Union gets 98% of its supply from China.

- Thus, there is a need to make the Import policy sustainable and find alternatives too.

What are Critical Minerals?

- Critical minerals are elements that are the **building** blocks of essential modern-day technologies and are at **risk of supply chain disruptions.**
  - ➤ **Risk:** Any supply shock can severely imperil the economy and strategic autonomy of a country over-dependent on others to procure critical minerals.

- These minerals are now used everywhere from making mobile phones, and computers to batteries, electric vehicles and green technologies like solar panels and wind turbines.

Major Critical Minerals:
- Graphite, Lithium and Cobalt are used for making EV batteries.
- **Cobalt, Nickel and Lithium** are required for batteries used in electric vehicles,
- Rare earth minerals are critical, in trace amounts, in semiconductors and high-end electronics manufacturing.

Why these Minerals are considered as Critical?

- **Building blocks of essential modern-day technologies:** They are used everywhere from making mobile phones, and computers to batteries, electric vehicles and green technologies like solar panels and wind turbines.

- **For green ecosystem:** As countries around the world scale up their transition towards clean energy and a digital economy, these critical resources are key to the ecosystem that fuels this change.

◉ CHALLENGES:

- **Threat to economic security:** An over-reliance on "foreign sources and adversarial nations for critical minerals

and materials posed national and economic security threats"

◎ **Risk of disruption:** Due to individual needs and strategic considerations, they are at risk of supply chain disruptions.

◎ **Low availability and increasing demand**

The looming threat:

● China is the world's largest producer of **16 critical minerals.**

● China is responsible for some 70% and 60% of the global production of cobalt and rare earth elements, respectively (2019).

● It also controls cobalt mines in the Democratic Republic of Congo, from where 70% of this mineral is sourced.

Steps taken by India regarding Critical Minerals:

◎ **Lithium Agreement:** In mid-2020, India **signed an agreement with an Argentinian** firm to jointly prospect lithium in the South American country that has the third largest reserves of the metal in the world.

◎ **India-Australia Partnership:** India and Australia decided to strengthen their partnership in the field of projects and supply chains for critical minerals.

◎ **Khanij Bidesh India Ltd. (KABIL):** A notable achievement of KABIL was the signing of an MoU between the Indian and Australian governments for cooperation in the field of mining and processing of critical minerals.

Minerals Security Partnership (2022):

● **Minerals Security Partnership (MSP)** is a US-led partnership initiative that aims to bolster critical mineral supply chains.

● The new grouping is aimed at catalyzing investment from governments and the private sector to develop strategic opportunities.

● India has shown interest in joining the USA-led Minerals Security Partnership (MSP) but has not found a place in the grouping because the country does not bring much expertise to the table.

● It would be desirable to participate in such multi-country dialogues.

INDIA'S CHANGING AGRICULTURAL LANDSCAPE AND ITS WAY TO INCLUSIVE GROWTH

CONTEXT:

India is predominantly an agrarian economy, and its changing agricultural landscape offers a key role in promoting inclusive growth.

Agriculture and Inclusive growth:

◎ The inclusive growth approach came into being with the launching of the 11th five-year plan (2007-12). Agricultural development is an important component of an **inclusive growth approach**.

◎ India has facilitated inclusive development in agriculture through the path of livestock and horticulture sector in the view of increasing farm income and farm sector growth.

◎ The **three key roles agriculture** can play in promoting inclusive growth - **stimulating economic growth, reducing poverty**, and **creating employment.**

◎ Thus, it's a key factor for the lifeline of our Indian population and the economy's overall productivity.

Evolution of Indian Agriculture:

◉ **During colonial times** there was a production concentration of commercial crops, while the food crops suffered from neglect.

◉ **Post-independence,** there was a need to import food grains due to the low-productivity stagnant food-crop sector, and poor rural infrastructure.

◉ The **first three five-year-old plans didn't yield** much as more emphasis was given to capital-intensive heavy industry. Thus, we faced a crisis in food production.

◉ **Green Revolution:** Its introduction of the Green Revolution then yielded spectacular results and we became one of the largest producers of many agricultural commodities such as rice, wheat, pulses, fruits, and vegetables.

◉ Indian agriculture now experiences a **'problem of plenty** (except edible oils).

◉ Indian agriculture is gaining further importance due to **significant export earnings**.

> **What is inclusive growth?**
>
> Inclusive growth means economic growth that creates employment opportunities and helps in reducing poverty.

How does agriculture contribute to economic development?

◉ **By providing food and raw material** to non-agricultural sectors of the economy.

◉ **By creating demand for goods produced in non-agricultural sectors**, by the rural people on the strength of the purchasing power, earned by them on selling the marketable surplus,

◉ By **providing investable surplus** in the form of savings and taxes to be invested in the non-agricultural sector,

◉ **By earning valuable foreign exchange** through the export of agricultural products.

Changing Dynamics of Agriculture in India:

◉ **Farm diversification for supplementing income: AgriTech startups** and digital tools are empowering farmers to integrate livestock rearing and aquaculture into their existing operations with micro-farm installation requiring minimum space and labour.

◉ **Improving digital & market connectivity:** With ever-increasing internet and smartphone penetration, and digital connectivity, farmers can access a slew of information about farming inputs, climate conditions, and market prices**.**

◉ **Availability of affordable & innovative farming inputs:** Technological improvements and competition among private companies have led to a surge in the supply of quality and affordable farming inputs.

◉ **Formal Credit Inclusion:** With the emergence of Fintech and AgriTech startups, the lending landscape of the country is changing.

◉ **The road to digital agriculture:** The initiation of the Digital Agriculture Mission by the government is set to pave the way for a new and futuristic farming model in India.

Gross Value Added (GVA) in Agriculture:

◉ The share of the agriculture & allied sector in total GVA of the Economy and allied sector has shown a long-term *(10 years)* trend of around 18 percent.

◉ The share, however, has increased to 20.2 percent in the year 2020-21 and 18.8 percent in 2021-22.

Figure 3: Percentage Share of GVA of Agriculture & Allied Sector to Total GVA (at current prices)
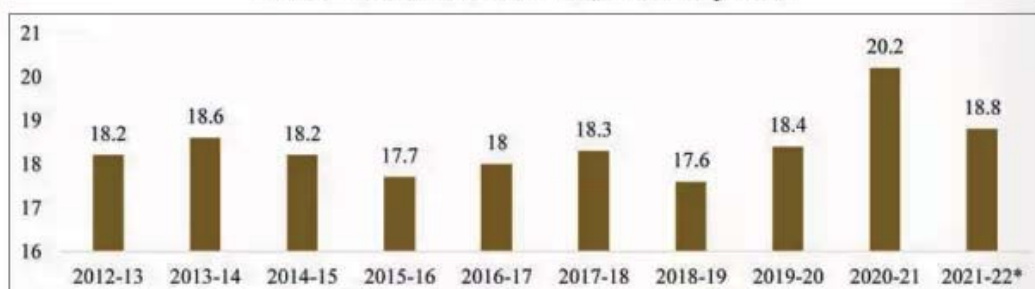
Source: Based on data of DAFW.
*As per 1st Advance Estimates of National Income, 2021-22.

Key trends to Expect:

- ◉ **Changing demand:** Demand for fruits and vegetables, dairy products, fish, and meat is going to increase in the future. There will be more demand for processed and affordable quality products.
- ◉ **Use of biotechnology**: To develop eco-friendly and disease-resistant, climate-resilient, more nutritious, and tastier crop varieties.
- ◉ **Precision farming:** Inputs will be utilized in precise amounts to get increased average yields, compared to traditional cultivation techniques such as agroforestry, crop rotation, etc.
- ◉ **Use nano-technology:** It will reduce the wastage in the use of chemicals, minimize nutrient losses in fertilization, and will be used to increase yield through pest and nutrient management.
- ◉ **Use of digital technology**: Apart from generating awareness among farmers, and information sharing, the use of satellites, IoT, and drones will be used for better collection of data regarding soil health, crop area, and yield. It will also be going to make the cost for insurers less.
- ◉ **Retailing in agriculture will largely be digitalized:** Over 90 percent of Kirana stores across the country will be digitalized by 2025. Many players have already taken Kirana stores to the doorsteps of consumers like Amazon and Jio Mart.

THE GEO-HERITAGE VALUE OF RAM SETU

CONTEXT:

The Supreme Court (SC) has given the Centre four weeks' time to file a response clarifying its stand on seeking national heritage status for the 'Ram Setu'.

What is Ram Setu?

- ◉ The Ram Setu or the Adam's Bridge is a limestone trail connecting **Pamban island** off the coast of Tamil Nadu to **Mannar island** off the coast of Sri Lanka.
  - ► Coral reefs are **massive structures made of limestone deposited by coral polyps**. Often referred to as the "**rainforests of the sea**," coral reefs support approximately **25 percent** of all known marine species.
- ◉ The limestone-based bridge is 48 kilometres long.

> **Mythological angle**
> - It is believed that this bridge was constructed so that Rama could go to Sri Lanka and find Sita, who had been kidnapped by Ravana.
> - As a result, it is revered by those who closely adhere to Hinduism. According to legends, the Ramayana, which Valmiki wrote, also includes information concerning the Ram Setu.

The proposed project and issues

- ◉ In 2005 the **Sethusamudram Ship Channel Project (SSCP)** was inaugurated.
- ◉ Under the project, an 83-km-long deep water channel was to be created, linking the **Gulf of Mannar** with Palk Strait, by extensive dredging and removal of limestone shoals.
- ◉ Two channels will be created –
  - ► one across Ram Setu, south-east of Pamban Island
  - ► another through the shallows of Palk Bay, deepening the Palk Strait
- ◉ The SSCP is expected to considerably reduce the navigation time between the east and west coasts of India.
- ◉ However, the project has been surrounded by several comments arguing the stability of the proposed channel and its environmental impact.

So far, ships going to the Gulf of Mannar, Ind[...]

Concerns Highlighted:

- **Religious beliefs:** The main opposition to the Sethusamudram project came from religious believers.

- **Threat to livelihood:** Fishermen from the Rameswaram region also opposed the project.

- **Impact on biodiversity:** The Gulf of Mannar region is a protected biosphere reserve and marine national park (notified in 1989). The project would have an impact on the region's biodiversity because it is home to numerous rare marine species (**fish, lobsters, shrimps and crabs**).

- **Other Concerns:**
  - ► Emissions from ships traversing the narrow channel will pollute the air and water.
  - ► The ship carrying oil or coal is grounded or strays from its course within the canal; it could cause an ecological disaster.
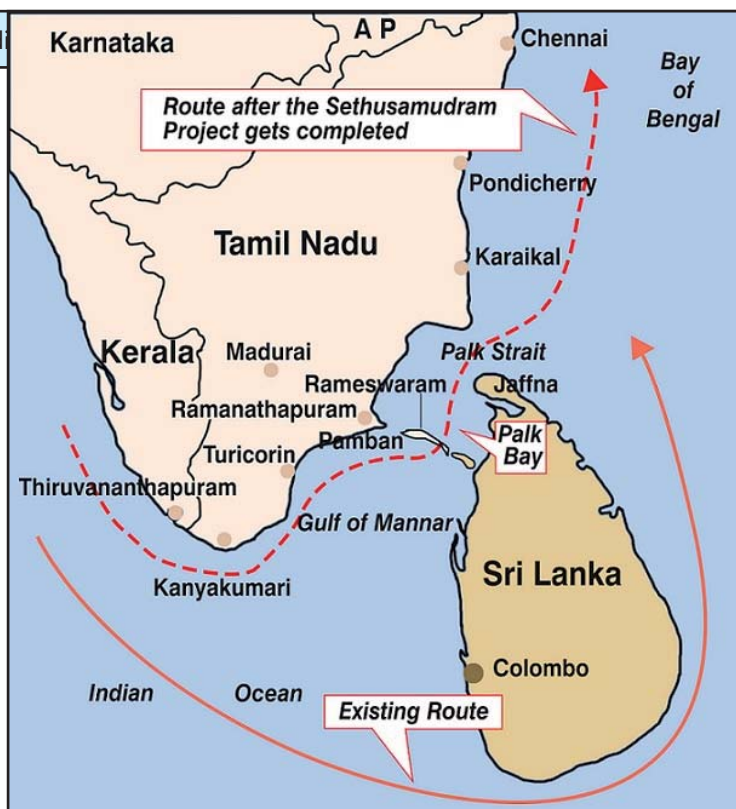
Challenges for the Project:

- The area is also vulnerable to cyclonic storms. A cyclone in 1964 was so powerful that it wiped out the town **of Dhanushkodi** in the region.

- No space to dump the dredging material from the sea.

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Section: B
(SPECIALS)

CURRENT AFFAIRS

INCREASING CASES OF GENDER BASED VIOLENCE IN INDIA

CONTEXT:

With the recently highlighted case of the Murder, of a 27-year old girl in a live-in relationship by her partner, stunned the country and highlighted the increasing rate of Gender based violence (GBV), especially against the young women.

What is Gender based violence?

⊙ Gender based Violence (GBV) means a harmful act directed at an individual based on their gender.

⊙ It is rooted in gender inequality, the abuse of power and harmful norms.

⊙ It is a serious violation of human rights and a life-threatening health and protection issue.

⊙ This violence is not just limited to physical violence but encompasses everything from **dowry deaths, honour killing, trafficking, domestic violence, intimate partner violence, sexual and emotional abuse, online abuse, child abuse, and caste-based violence among others.**

The Numbers:

● The **National Crime Records Bureau** in its *Crimes in India Report 2019* has recorded a 7.3% increase in crimes against women when compared to 2018.

● Under the report 30.9% cases recorded were of **domestic violence** and 7.9% were of **rape**.

● It indicates that amongst the crime rate per lakh of women population, **33.2%** of women have faced by **physical/sexual intimate** and **non-intimate partner violence**.

● **1 in every 3 women** is a victim of Gender-based violence (GBV).

● The Coronavirus pandemic has resulted in a **two-fold increase** in GBV cases across the country.

What are the Factors Contributing to GBV?

⊙ Unequal status in Society

⊙ Vulnerability of Women

⊙ Gender Disparity

⊙ Psychiatric Morbidity

⊙ Sociodemographic factors

⊙ Family factors

Impacts:

● **On Women:**

⊙ Threatens the autonomy and dignity

⊙ Great economic, social, physiological, psychological and behavioural consequences

⊙ Loss of self-believe

⊙ Creates a social stigma for women who are Raped or sexually exploited

⊙ Increase in instances of early marriage due to fear of parents for young girls/women of GBV.

⊙ Illiteracy amongst women

⊙ Impact on mental health

● **On India as a country:**
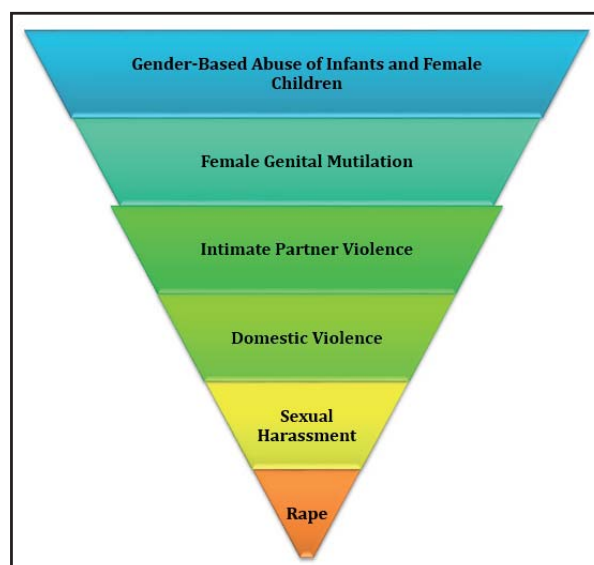
Political	Economic	Social	International
A Politically strong and diverse country like India cannot afford such issues to rise as it highlights the policy failures by the government.	As Women contribute to half of India's population, but are paralysed by these violence creates a loss in economic advantage of a country.	Social norms for women where there still exists a mind-set of purity and test for women's character makes India resolve such issues to make a welfare environment for Women to live.	The Country like India where the Form of Women as a 'mother' is treated as 'Goddess', but else by those men treated as an object creates a question on the authenticity of culture.

What are the loopholes in approach to address the issues?

◎ **Victimsation of Women**: Gender-based violence in India includes eliminating the institutional hurdles facing women, which leads to secondary victimization.

◎ **Socially baised officials/decision makers**: When women seek help, they are treated with hostility or negligent or discriminatory fashion by officials in charge of supporting them.

◎ **Patriarchal Norms**: The obvious progress made in the region in extending women's formal rights has yet to lead to a practical application of those rights on a day-to-day basis, either within or outside the justice administration sphere.

Provisions to curb violence (in India):

• **Article 14:** It confers on men and women equal rights and opportunities in the political, economic and social sphere.

• **Article 15:** It prohibits discrimination against any citizen on the grounds of religion, race, caste, sex, etc.

• **Article 16:** It provides for equality of opportunities matters relating to employment or appointment to any office under the state.

• **Article 39(a)(d):** It mentions policy security of state equality for both men and women the right to a means of livelihood and equal pay for equal work for both men and women.

• **Article 42:** It directs the State to make provision for ensuring just and humane conditions of work and maternity relief.

Some Legal Provisions for Women:

• **Indian Penal Code:** Section 354 and 509 safeguards the interests of women.

• **Factories Act 1948:** Under this Act, a woman cannot be forced to work beyond 8 hours and it also prohibits employment of women except between 6 A.M. and 7 P.M.

• **Maternity Benefit Act 1961:** A Woman is entitled 12 weeks' maternity leave with full wages.

• **The Dowry Prohibition Act, 1961:** Under this Act demand of dowry either before marriage, during marriage and or after the marriage is an offense.

• **The Medical Termination of Pregnancy Act of 1971:** It safeguards women from unnecessary and compulsory abortions.

• **The Equal Remuneration Act of 1976:** It provides equal wages for equal work to both men and women workers for the same work or work of similar nature. It also prohibits discrimination against women in the matter of recruitment.

• **The Child Marriage Restraint Act of 1976:** It raised the age for marriage of a girl to 18 years from 15 years and that of a boy to 21 years.

• **73rd and 74th Constitutional Amendment Act:** These Constitutional Amendments Act reserved 1/3rd seats in Panchayat and Urban Local Bodies for women.

• **The National Commission for Women Act, 1990:** The Commission was set up in 1992 to review the Constitutional and legal safeguards for women.

• **Protection of Women from Domestic Violence Act, 2005:** It is a legislation aimed at protecting women from violence in domestic relationships. It refers to harming or injuring a woman in a domestic relationship, be it physical abuse, sexual abuse, verbal or emotional abuse, or economic abuse.

How can gender-based violence be stopped?

◎ Challenging social norms, creating awareness

◎ proactive media representation

◎ supporting the survivors of gender-based violence

◎ strengthening legislation to criminalise violence

◎ Society need to take accountability and comprehensively address GBV

Section: C
(PRELIMS

CURRENT AFFAIRS

DEATH ANNIVERSARY OF UDA DEVI

⊙ **CONTEXT:** November 16 marks the death anniversary of Uda Devi, the Dalit freedom fighter.

⊙ **ABOUT:**
- Uda Devi was a freedom fighter from the '**Pasi' community.**

- She managed to mobilise people — especially Dalit women — to take up arms against the British.

- Born in **Ujirao, Lucknow**, she was part of the **royal guard of Begum Hazrat Mahal of Awadh.**

- Her husband, **Makka Pasi**, worked as a foot soldier in the army of **Awadh's Nawab, Wajid Ali Shah.**

  - Amid the revolt of 1857, on June 10, at Chinhat near Ismailganj, a battle was fought between the army of Lucknow and the British troops led by **Henry Lawrence**, in which **Makka Pasi lost his life.**

  - The death of her husband spurred Uda Devi on to take up a more active role in the mutiny.

- On November 16, 1857, Uda Devi was among the soldiers who clashed with the British regiment stationed near the '**Gomti River'.**

Women Participation in 1857 Freedom struggle:

- **Rani Laxmi Bai:** Lakshmi Bai is remembered for her valour during the **Indian Mutiny of 1857–58**.

- **Baiza Bai:** As a prominent opponent of the East India Company, she was eventually ousted from power and replaced on the throne by her adopted son **Jankoji Rao Scindia II** despite the **Doctrine of Lapse** was at peak.

- **Helen Lepcha alias 'Sabitri Devi'**: She was an unsung freedom fighter who helped **Netaji Bose** escape and fought alongside **Mahatma Gandhi** in the **Non-Cooperation movement.**

- **Rani Gaidinliu (Rani of the Nagas):** She led a revolt against British rule in India. At the age of 13, she joined the **Heraka religious movement**. Jawaharlal Nehru gave her the title of "Rani" (Queen), and she gained local popularity as Rani Gaidinliu.

BUDDHIST NYINGMA SECT FINDS 'REINCARNATION' OF FAMOUS RINPOCHE

⊙ **CONTEXT:** In a significant development in the Tibetan Buddhist circles, the Nyingma sect has identified a boy from Spiti in Himachal Pradesh as the reincarnation of the late Taklung Setrung Rinpoche, a scholar known for his knowledge of Tibetan Tantric School.

⊙ **BACKGROUND:**

- Schools of Buddhism came into existence with the passage of time. The two primary schools of Buddhism were
  - Theravada School of Buddhism
  - Mahayana School of Buddhism

- Later, from these two branches several forms of Buddhism came into existence.

The Five Precepts of Buddhism (Basic Principles):
- Refrain from taking life. Not killing any living being.
- Refrain from taking what is not given. Not stealing from anyone.
- Refrain from the misuse of the senses. Not having too much sensual pleasure.
- Refrain from wrong speech.
- Refrain from intoxicants that cloud the mind.

- Though the form of expression in these schools differs but the **basic principles remain the same**.

Schools in Buddhism:
- **Theravada School of Buddhism**: It was popularized in Sri Lanka, Myanmar, China and other Asian countries.
  - According to the doctrine of Theravada Buddhism, an individual needs to abide by the basic principles of Buddhism strictly.
- **Mahayana School of Buddhism**: The main idea behind Mahayana Buddhism is that anyone can reach the stature of the Buddha by following Buddha Marga. Mahasanghika sect is believed to be the source of the Mahayana Buddhism.
  - This school of Buddhism had a huge impact **on China, Korea and Japan.**
- **Vajrayana School of Buddhism:** This is the tantric school of Buddhism. It is believed that by practicing Vajrayana, a Buddhist follower can achieve enlightenment easily.
  - It is more popularly used in Tibetan Buddhism. When considered on a larger aspect, it is a part of the Mahayana school of Buddhism.
  - It is also commonly referred to as '**Lamaism**' because at the center of the school lies the **Lama.**

The Nyingma Sect of Buddhism:

- As Buddhism made progress and spread to different parts of the world, new thoughts and improvisations came to be attached to the existing beliefs and practices.
- This process led to the development and evolution of different schools or sects.
- The **Nyingma sect** is the oldest of all Buddhist sects.
- It is practiced under the **Vajrayana School of Buddhism.**
- The followers of the sect are spread across **Tibet, Bhutan, Ladakh, Sikkim and other Himalayan Buddhist pockets.**

Who was Taklung Setrung Rinpoche?

- **Taklung Setrung Rinpoche** was a profound scholar renowned for his expertise in **Tibetan Tantric School.**
- The Rinpoche used to live in the **Takthok monastery** of Ladakh, one of the oldest monasteries related to **the Nyingma sect**.
- The **Rinpoche** was widely consulted by the followers of the faith.

The Concept of 'Reincarnation' in Buddhism:
- The process of reincarnation that has to be determined following the physical demise of a revered monk.

- Following the Buddhist belief in the **principle of rebirth,** the Dalai Lama is believed by Buddhists to be able to choose the body into which he is reincarnated.
- The search involves **consulting oracles, interpreting visions and reading spiritual signs.**
- The incarnation is, therefore, an important development as this is the continuation of an important teacher.

BALIYATRA: CELEBRATING ODISHA'S ANCIENT LINKS WITH INDONESIA AND SOUTHEAST ASIA

⊙ **CONTEXT:** **Bali Yatra, one of the biggest trade fairs in Odisha, was held on November 12 for eight days.**

What is Bali Yatra?

- Bali Jatra (also known as Bali Yatra and Boita Bandaṇa) literally means '**A Voyage to Bali'.**
- This festival is held in **Odisha**, in the city **of Cuttack at Gadagadia Ghata** of the **Mahanadi River**.
- **Organized every year to commemorate the 2,000-year-old** maritime and cultural links between ancient **Kalinga (today's Odisha)** and **Bali** and **other South and Southeast Asian regions** like Java, Sumatra, Borneo, Burma (Myanmar), and Ceylon (Sri Lanka).
- The festival is celebrated from the **day of Kartika Purnima** (**full moon night in the month of Kartik)** can **according to the Odia Calendar**, which comes around the end of October and November.
- **People of Odisha gather near the banks of Mahanadi**, **Brahmani River**, other river banks, and ponds **to float miniature toy boats,** made of colored paper as **a symbolic gesture of their ancestors' voyage.**

The festival is similar to the **'Masakapan Ke Tukad'** festival of Bali, the '**Loi Krathong'** festival of Thailand (ritualistic floating of model boats), the '**Bon Om Touk'** Water Festival of Cambodia, and the '**That Luang'** Festival of Laos all of which involve around the same time of the year.

Odisha and Bali connection:

Odhisha was known as **Kalinga in ancient times** and was commanded by a very high position in the maritime activities of India in the past. The **heroic and ever-agile merchants** of the ancient Kalinga kingdom were making daring voyages to different far-off lands of the world.

- **Odisha played a significant role in the evolution of Hindu culture in Bali**.
- A section of Brahmanas in the Karangasem district of Bali styled themselves as **Brahmana - Bouddha – Kalinga.**
- It seems very likely that their ancestors were immigrants from Kalinga.
  - Some words and usages concerning vocabulary, crafts, and religious practices, forms of worship, food habits, and manners prevalent in Bali are Odia in origin.

Do you know?

The district administration allots stalls to traders through an auction, and the fair is estimated to see business worth more than **Rs.100 crore over its nine days.**

- There are linguistic parallels between Odisha and the island of Bali.
- Both the Balinese and the Odias' food habits seem to have some common likes and dislikes.

ANDAMAN & NICOBAR'S FIRST APPLICATION FOR THE GI TAG IS FOR "NICOBARI HODI CRAFT"

◉ **CONTEXT:** The GI Registry at Guindy, Chennai, has received an application from the Tribal Development Council, Andaman & Nicobar Islands, seeking the GI tag for the Nicobari hodi craft.

About Nicobari hodi:

- "Hodi" is the Nicobari tribe's traditional craft.

- It is an **outrigger canoe**, very commonly operated in the Nicobar group of islands.

- The technical skills for **building a hodi are based on indigenous knowledge inherited** by the Nicobarese from their forefathers.

- The **hodi is built using either locally available trees or from nearby islands**, and its design varies slightly from island to island.

- Hodis is used for transporting people and goods from one island to another, for sending coconuts, and for fishing and racing purposes.

- **Hodi races are held between islands and villages.**

- This is the **first application from the Union Territory** seeking a tag for one of its products.

> **People and History:**
> - **Nicobarese and Shompens** belonging to **Mongoloid race** inhabit these islands who differ from Andaman tribes belonging to Negritoid race.
> - The major population of Nicobari tribe is living in **Car Nicobar Island** which is one among the 11 inhabited islands of the Nicobar district under the Union territory of Andaman and Nicobar Islands.
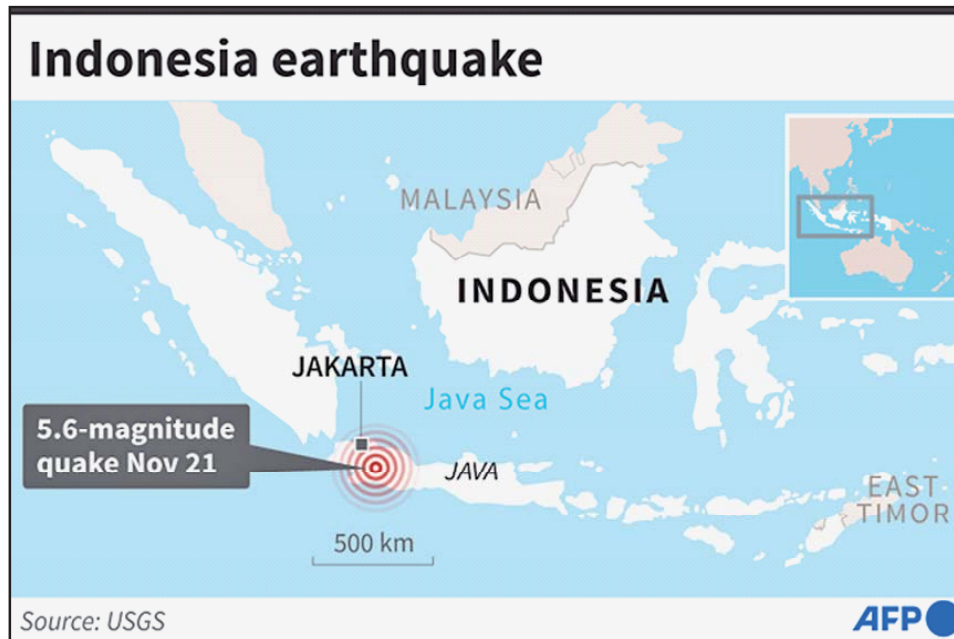
WHY INDONESIAN EARTHQUAKE WAS SO DEADLY?

◉ **CONTEXT:** The recent Earthquake (Magnitude 5.6) in West Java province of Indonesia led to massive devastation in the island country.

- So, let us find out the reasons contributing to the region's vulnerability to natural disasters.
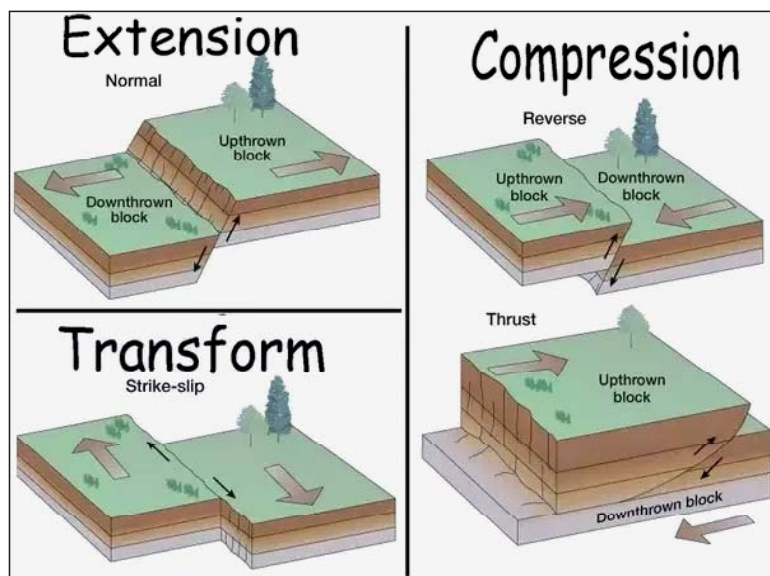
About the Location:

- The Island is prone to frequent **earth quakes, Tsunamis, volcanic eruptions**.

- **West Java** is a province of Indonesia on the **western part of the island of Java**, with its provincial capital in **Bandung**.

- West Java is bordered by the country's **capital region of Jakarta** to the west, the **Java Sea** to the north, the province of **Central Java** to the east and the **Indian Ocean** to the south.

- **Tectonics and seismicity** of Jakarta and adjacent areas is highly influenced by the convergence of the **Australian Plate** toward the **Eurasian Plate**.

Indonesia earthquake

MALAYSIA

INDONESIA

JAKARTA

Java Sea

5.6-magnitude
quake Nov 21

JAVA

EAST
TIMOR

500 km

Source: USGS

AFP

Occurrence of Earthquakes:

- An **earthquake** is the shaking of the earth. It is a natural event.
- It is caused due to release of energy, which generates waves that travel in all directions.
- The vibrations called **seismic waves** are generated from earthquakes that travel through the Earth and are recorded on instruments called **seismographs.**
- The location below the earth's surface where the earthquake starts is **called the hypocenter**, and the location directly above it on the surface of the earth is called **the epicenter.**

Extension
Normal
Upthrown block
Downthrown block

Compression
Reverse
Upthrown block
Downthrown block

Transform
Strike-slip

Thrust
Upthrown block
Downthrown block

## Geographic factors Responsible for Earthquakes in the region:

- **Located on the Ring of fire**: because of its location on the **arc of volcanoes and fault lines** in the Pacific Basin known as the '**Ring of Fire',** it becomes one of the places where a majority of the world's earthquakes occur.
- **Movement of Fault lines:** Due to number of rocks placed inside the island forms fault lines, they are continuously moving with respect to normal rocks. Hence, they can slide over each other easily and are not stiff.

Types of earthquakes:
- Tectonic earthquakes
- Volcanic earthquakes
- Human induced earthquakes

A fault is a place with a **long break in the rock** that forms the surface of the earth. When an earthquake occurs on one of these faults, the rock on one side of the fault slips with respect to the other.
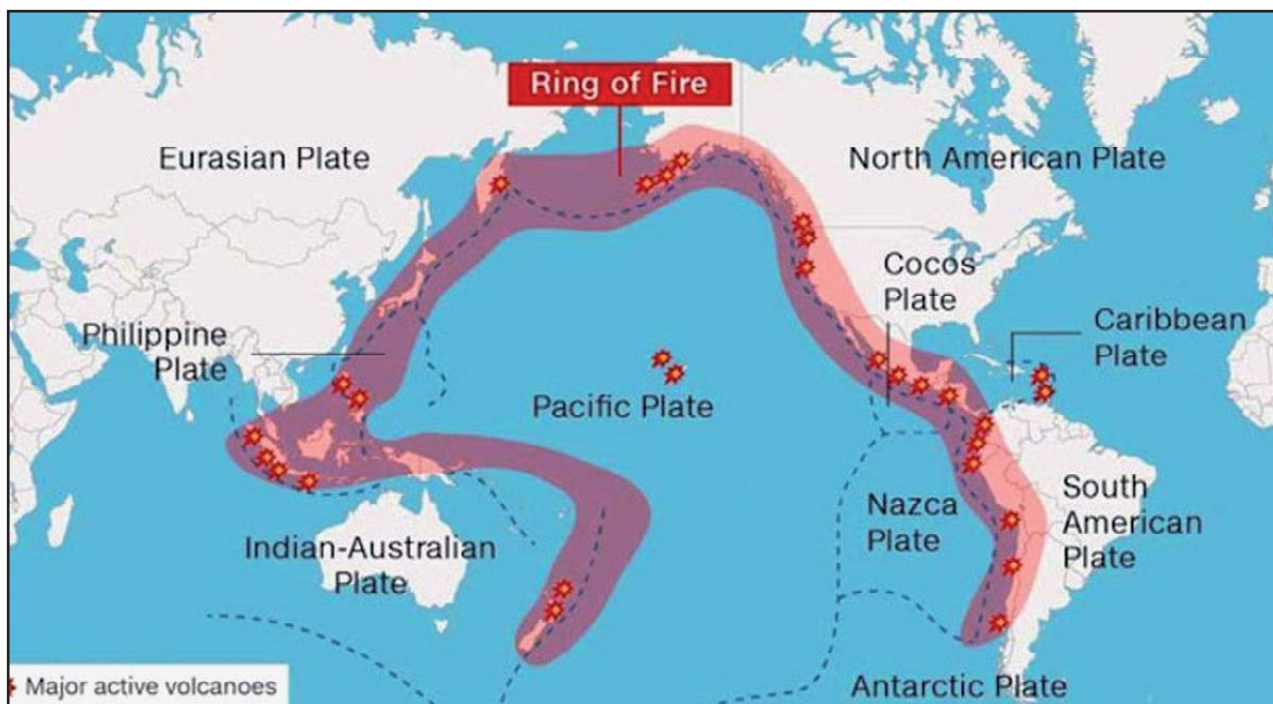
- **Type of Soil:** The Indonesian island is made of **basically volcanic soil** made up of ashes which is similar to black soil in India. This soil easily gets settled down and is easy to swell and shrink.

  - The **Structure holding capacity** the soil is also poor.

SUPREME COURT ON SHORT TENURES OF CHIEF ELECTION COMMISSIONERS

⊙ **CONTEXT:** In a stateent came by the Constitution Bench of the Supreme Court, the short tenure of the Chief Election Commissioner (CEC) is hindering the 'independence of the office'.

About The Issue:

- It has been observed over several years that the tenure of the office of CEC remained to be too short. In the year 2014 to 2022, there has been **eight CECs** been appointed.

- This has drawn arguments against the Centre's policy to appoint a person in the office whose tenure remains short by default.

- This disturbs the working and efficiency of the Election Commission. Hence, the bench has seen issues with the appointment of CECs.

The Election Commission of India (ECI):

- The Election Commission of India (ECI) is an **autonomous constitutional authority** responsible for administering **Union and State election** processes in India.

- The body administers elections to the Lok Sabha, Rajya Sabha, and State Legislative Assemblies in India, and the offices of the President and Vice President in the country.

It is not concerned with the **elections to panchayats and municipalities** in the states. **For this, the Constitution of India provides for a separate State Election Commission.**

Important Constitutional Provisions:

Part XV (**Article 324-329**) of the Indian Constitution:

- **Article 324**: Superintendence, direction and control of elections to be vested in an Election Commission.
- **Article 325**: No person to be ineligible for inclusion in, or to claim to be included in a special, electoral roll on grounds of religion, race, caste or sex.
- **Article 326**: Elections to the House of the People and to the Legislative Assemblies of States to be on the basis of adult suffrage.
- **Article 327**: Power of Parliament to make provision with respect to elections to Legislatures.
- **Article 328**: Power of Legislature of a State to make provision with respect to elections to such Legislature.
- **Article 329**: Bar to interference by courts in electoral matters.

Structure of the Commission:

- Originally the commission had only **one election commissioner** but after the Election Commissioner Amendment Act 1989, it has been made a multi-member body
- The Election Commission shall consist of the **Chief Election Commissioner (CEC)** and such number of other election commissioners, if any, as the President may from time to time fix.
- Presently, it consists of the **CEC and two Election Commissioners**.
- At the **state level**, the election commission is helped by the Chief Electoral Officer who is an IAS rank Officer.

The Chief Election Commissioner:

- The Chief Election Commissioner of India heads the Election Commission of India.
- This power of the Election Commission of India is derived from the **Article 324** of the Constitution of India.

Appointment of CEC:

- There is no prescribed procedure for appointment of the Chief Election Commissioner and Election Commissioners as **per the constitution**.
- Under the **Transaction of Business rules**, the President shall appoint the CEC and EC based on the recommendations made by **the Prime Minister**.
- Therefore, it is the **executive power of the President** to appoint CEC and ECs.
- However, according to **Article 324(5)**, the Parliament has the power to regulate the terms of conditions of service and tenure of ECs. It is under this article that the Parliament has made laws till date.

Tenure of Commissioners:	Removal:
• They have a **fixed tenure of six years, or** up to the **age of 65 years**, whichever is earlier.	• They can resign anytime or can also be removed before **the expiry of their term.**
• They enjoy the same status and receive salary and perks as available to Judges of the Supreme Court (SC) of India.	• The CEC can be removed from office only through a process of removal similar to that of a SC **judge by Parliament**

Concerns over tenure of CEC vs. Centre's Intervention:

- **Lack of Transparency**: Centre's intervention in appointment of CEC remains highly on the discretion of the present government and its suggestion to the President.
- **Lack of Consensus based appointment**: There is no procedure to draw suggestions before appointing the

CEC.

- **Strategic move by the Centre**: As the Election commission is an important and independent body; it must have its head to also be independent from any biases which is withdrawn.
  - As Government tends to appoint a person who works for their favour.

◉ **SUGGESTIONS:**

- **Law Commission 255th Report on Electoral Reforms: Strengthening the office of the Election Commission of India:**

The Commission in its report inter-alia suggested, the ECI must be strengthened by:

  - Giving equal constitutional protection to all members of the Commission in matters of **removability;**

  - Making the **appointment process** of the Election Commissioners and the CEC consultative; and

  - Creating a permanent, **independent Secretariat** for the ECI.

- **Need of a Collegium system**: Appointments through collegium or any other system as discussed in constitutional debate can bring **more transparency** in the appointment process.

CJI TO REVIEW THE COLLEGIUM SYSTEM AND REVIVE NJAC

◉ **CONTEXT:** The Chief Justice of India agreed to reconsider the Collegium system and the revival of the National Judicial Appointment Commission (NJAC) for judicial appointments to the Supreme Court and the High Courts.

The National Judicial Appointment Commission:

- **Appointment of CJI**: It provided for the CJI's appointment along with those of the judges for the Supreme Court and HC's Chief Justice judges.

- **The commission shall comprise the following members**;
  - The Chief Justice of India (ex-officio, Chairperson of the NJAC)
  - Two senior Supreme Court judges (ex-officio)
  - The **Union Minister of Law and Justice** (ex-officio)
  - Two eminent persons who are to be nominated by a committee comprising of the CJI, the **Prime Minister of India** and the **Leader of opposition in the Lok Sabha** or where there is no such Leader of Opposition, then, the Leader of the single largest Opposition Party in Lok Sabha).
  - One person to be from the **Scheduled Castes/Scheduled Tribes/OBC/Minority/Woman.**

- **Term of the service**: No re-nomination after having served a **term of 3 years.**

What are the arguments in support of NJAC?

- NJAC Act ends the opaque mechanism and ensures transparency and accountability within the collegium system.

- NJAC Act brings integrity between the judiciary and executive and makes it all-inclusive.

- Involvement of the Government and people from other background can make the appointment more diverse and with a real perspective.

- Issues of Minorities, SCs, STs and Women will also be given preference. It can also lead to more Women Judges in the higher decision-making system.

INDIA AND THE IVORY TUSSLE BETWEEN CITES AND AFRICAN COUNTRIES

⊙ **CONTEXT:** The four African Countries namely Namibia, Botswana, South Africa, and Zimbabwe, has approached CITES for removal for elephant from Appendix II conservation status for regulation of controlled ivory trade from the region to generate revenue.

⊙ **BACKGROUND:**

- At **CoP17 and CoP18**, India voted **against proposals to re-open trade** in ivory from the southern African states.

- **In Johannesburg**, South Africa, five years ago, India expressed its willingness to share their experiences of protecting elephants and supporting rural development without recourse to trade in ivory.

What is an Ivory mean?

- It is the hard white substance that the tusks of an elephant are made of. Across the world, ivory is viewed as a status symbol.

- Historically, it was used to produce **ornaments, figurines, and small carvings**, as well as items like **jewellery, piano keys, and chess sets**.

- Traditional medicine also views ivory as a healing element, using ivory powder to create medicine for a variety of illnesses.

About the issue in CoP 19 event:

- In the on-going CoP 19 **event Zimbabwe** has proposed for allowing a regular form of controlled trade in ivory by delisting the elephant populations of the four countries from Appendix II which got rejected in the event.

- CoP is the **supreme decision-making body of CITES** which applies a set of biological and trade criteria to evaluate proposals from parties to decide if a species should be in Appendix I or II.

- CITES **Appendix I** list species threatened with extinction — import or export permits for these are issued rarely and only if the purpose is not primarily commercial.

- CITES **Appendix II** includes species not necessarily threatened with extinction but in which trade must be strictly regulated.

The Tussle over Ivory:

- The international ivory trade was globally banned in 1989 when all African elephant populations were put in CITES Appendix I.

- However, the populations of **Namibia, Botswana, and Zimbabwe** were transferred to Appendix II in 1997 and South Africa's in 2000 to allow two "**one-off sales**" in 1999 and 2008 of ivory stockpiled from natural elephant deaths and seizures from poachers.

- The **four southern African** countries argue that their elephant populations have bounced back and that their **stockpiled ivory**, if sold internationally, can generate much-needed revenue for elephant conservation and incentivising communities.

- Opponents of the ivory trade counter that any form of supply stokes demand and that sharp **spikes in elephant poaching** were recorded across the globe after the one-off sales allowed by the **CITES in 1999 and 2008.**

India and ivory trade:

- The **endangered Asian elephant** was included in CITES Appendix I in 1975, which banned the export of ivory from the Asian range countries.

- In 1986, India amended **The Wild Life (Protection) Act, 1972** to ban even domestic sales of ivory.

- After the ivory trade was globally banned, India again amended the **law to ban the import of African ivory in 1991.**
- In 1981 when New Delhi **hosted CoP3**, India designed the **iconic CITES logo** in the form of an elephant.
- Over the years, India's stand has been **unequivocal** on the ivory issue.

METHANE EMISSIONS TO RISE BY 5-13% TILL 2030: REPORT

⊙ **CONTEXT:** The latest *Global Methane Assessment: 2030 Baseline Report*, launched at the Climate and Clean Air Ministerial Meeting at COP27, highlighted that the Methane emissions is going to rise by 5-13% till 2030.

Key highlights of the Report:

- There is an estimated increase of **20-50 million tonnes** of methane per year above current levels.
- This greenhouse gas is responsible for nearly 45 per cent of current net warming.
- The report evaluated the baseline (a scenario of what would happen without efforts) such as the **Global Methane Pledge.**

> The **Global Methane Pledge** was announced last year at CoP26. The goal is to slash global methane emissions by at least **30 per cent** from 2020 levels by 2030. Achieving the pledge could eliminate **over 0.2 degree Celsius** of warming from 2040-2070.
>
> - At CoP27, **150 nations joined the pledge**, where India and China have not made the commitment yet.

- Methane levels in the atmosphere in 2021 reached a record high of 1908 parts per billion. This is 262 per cent of the preindustrial era levels, according to the World Meteorological Organization.
- **Major sources of methane:** Agriculture, human activity, fossil fuels, solid waste and wastewater

> At CoP27, UN launched the **Methane Alert and Response System (MARS)** to track methane emissions. It will go live in January 2023.
>
> - It is a part of global efforts to slow climate change by **tackling global warming gas.**
> - It will use **state-of-the-art satellite** data to identify significant emission events, notify relevant stakeholders, and support and track mitigation progress.

Steps taken to Curb Methane Emissions:

- **COP 26 Pledges**: At COP26 in Glasgow, over 100 countries signed an agreement to cut methane emissions by 30% by 2030.
- **MethaneSAT:** Controlling methane emissions will require further scrutiny of its sources. To this end, satellites that will track methane leakage such as *MethaneSAT* have been planned to launch.
- The **International Energy Forum (IEF)** launched the **IEF Methane Initiative in June 2021** to develop a methane emissions measurement methodology.

INDIA'S FIRST NATIONAL CENTRE OF EXCELLENCE FOR GREEN PORT & SHIPPING (NCOEGPS)

⊙ **CONTEXT:** The Union Minister of Ports, Shipping & Waterways (MoPSW) launched the India's first Centre of Excellence for Green Port & Shipping to provide Green solutions to transform Ports & Shipping sector in India.

◉ **ABOUT:**

The National Centre of Excellence for Green Port & Shipping (NCoEGPS):

- **Aim:** To develop a regulatory framework and alternate technology adoption road map for Green Shipping to foster **carbon neutrality and circular economy (CE)** in shipping sector in India.

> **Circular Economy:** A circular economy is a model of **production and consumption**, which involves **sharing, leasing, reusing, repairing, refurbishing and recycling** existing materials and products as long as possible.

- NCoEGPS will act as a **technological arm** of MoPSW for providing the needed support on Policy, Research and Cooperation on Green Shipping areas for Ports, DG Shipping, Corporate Social Lendings and other institutions.

- The Center will be a host of several technological arms to support the port and shipping sector and will provide solutions to a variety of problems being faced in the industry through scientific research.

- It will also carry out valuable education, applied research and technology transfer in maritime transportation at the **local, regional, national and International levels**.

- **It will focus on the following areas:**

  - **Energy Management** - Energy management tools, waste energy recovery systems

  - **Emission Management**- Alternate, clean Energy/Fuel, emission control & monitoring.

  - **Sustainable Maritime Operations** – novel technologies and approaches

The specific objectives of the formation of NCoEGPS are defined as follows -

- **To empower 'Make in India'** in Port, Coastal and Inland water transport, and Engineering by developing state of art technologies and application products.

- **To enable fast-track innovations** in order to provide most appropriate solutions to various challenges in these sectors.

- **To create a pool of competent manpower t**o the industry equipped with state of the art theoretical and practical knowhow.

- **Self-sufficiency in providing short term solutions** through scientific studies technology development technical arm in identifying and analysing complex problems and solving issues

Project Implementation:

- The **Energy and Resources Institute (TERI**) is the knowledge and implementation partner for this project.

- The **Deendayal Port Authority** Kandla, **Paradip Port Authority**, Paradip**, V.O Chidambaranar Port** Authority, Thoothukudi and **Cochin Shipyard Limited**, Kochi has all extended their support to the ministry to set up the centre.

- The ports have also aimed to reduce **Carbon emissions per ton of cargo** handled by 30% by 2030.

- India will also be implementing **IMO energy efficiency requirements** for existing ships and carbon intensity requirements on all its vessels whether coastal or international in order to help achieve IMO **GHG reduction targets.**

- The NCoEGPS will be working under the framework of the **Sagarmala programme o**f the MoPSW.

◉ **SIGNIFICANCE:**

- **Help to achieve Inclusive growth**

- **Fulfilling Paris accord**: It will also help to meet (and exceed) obligations under the **Paris Accord** through electrification of process.

- **Improve Training and Capacity building**

Other Government Initiatives:

- **Maritime Vision Document 2030**: It is a 10 Year blueprint on India's vision of a **sustainable Maritime sector** and **vibrant blue economy**.

- India's **Nationally Determined Contributions (NDC)** under the **Paris Agreement** for the Period 2021-2030 includes reducing the emissions intensity of its GDP by **33 to 35 per** cent by 2030.

INDIA PLANS TO SHOWCASE NAGALAND'S HORNBILL FESTIVAL AT G20

⊙ **CONTEXT:** India plans to showcase Nagaland's famous Hornbill Festival when it assumes the G20 presidency on December 1.

⊙ **ABOUT**

The Hornbill Festival:

- The Hornbill Festival is celebrated in **Nagaland** to encourage **inter-tribal interaction.**

- The festival is celebrated **annually** in the **first week of December** to preserve, protect and revive the uniqueness and richness of the Naga heritage.

- The festival is considered the **"Festival of Festivals"** in Nagaland.

About the Hornbill Species:

- They are a family of bird found in **tropical and subtropical** Africa, Asia and Melanesia.

- They are characterized by a **long, down-curved bill** which is frequently brightly coloured and sometimes has a casque on the upper mandible.

- They are the only birds in which the first and second neck vertebrae (the atlas and axis respectively) are fused together.

- The family is omnivorous, feeding on fruit and small animals.

- They are monogamous breeders nesting in natural cavities in trees and sometimes cliffs.

- **Protection Status:**

  ➤ **Threatened** in India

  ➤ **Extinct** in South Asia

  ➤ **IUCN Status:** Vulnerable

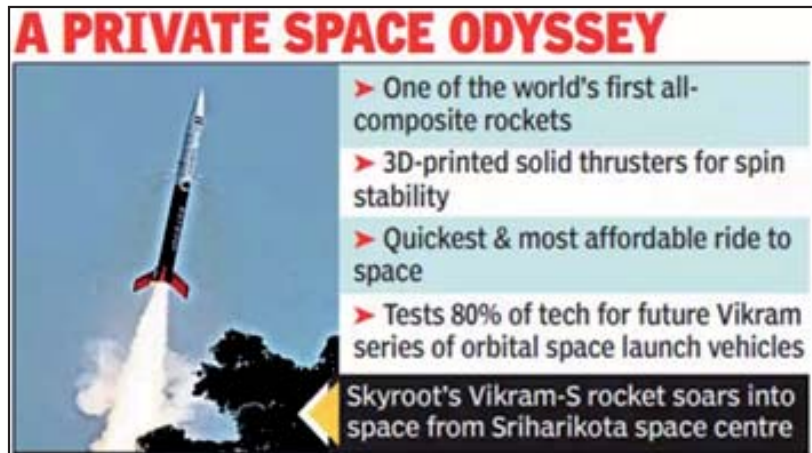# VIKRAM-S, INDIA'S FIRST PRIVATE ROCKET LIFTS OFF FROM ISRO SPACEPORT

⊙ **CONTEXT:** In a historic moment Vikram-S, India's first privately-developed rocket, lifted off from the Indian Space Research Organization's (ISRO) launch pad in Sriharikota, under the 'Prarambh' Mission.

About Vikram-S Rocket:

- **Named after: Vikram Sarabhai**, the founder of India's space programme.

- **Developed by: Skyroot Aerospace** with support from ISRO and IN-SPACe (Indian National Space Promotion & Authorization Centre.

- The Vikram-S rocket is a **single-stage sub-orbital launch vehicle**.
  - It carried three customer payloads and help test and validate technologies in the **Vikram series space launch vehicles.**

- **Engine:** Its engine was developed using **3D printing with a superalloy.**
  - The engine used in the launch vehicle is named after former president Dr. A P J Abdul Kalam, **'Kalam-80'.**

A PRIVATE SPACE ODYSSEY

➤ One of the world's first all-composite rockets

➤ 3D-printed solid thrusters for spin stability

➤ Quickest & most affordable ride to space

➤ Tests 80% of tech for future Vikram series of orbital space launch vehicles

Skyroot's Vikram-S rocket soars into space from Sriharikota space centre

About Skyroot

- The company is **based in Hyderabad.**

- It builds state-of-the-art space launch vehicles for launching **commercial satellites into space**.

- It aims to **disrupt entry barriers to cost-efficient satellite launch services** and space flight by advancing its mission to make space flights affordable, reliable, and regular for all.

Significance of privatization of the space sector

- **Low costs:** It has allowed companies like SpaceX, Blue Origin, etc. to cut their costs substantially and perform operations at reduced costs.

- **Creating widespread interest:** The publicity of their operations, like live streaming launches, has sparked widespread interest in space exploration among the general public.

- **Quick decision-making:** There is quick decision-making in private companies while the same process in a public enterprise would have to pass through several stages**.**

- **Higher autonomy:** private companies have a greater degree of autonomy in making decisions, which enables them to take up new projects.

ANTIMICROBIAL RESISTANCE HAS BEEN RECOGNISED AS A 'SILENT PANDEMIC'

⊙ **CONTEXT:**   **In a Report by the Centre for Science and Environment (CSE) to mark World Antimicrobial Awareness Week (WAAW) has mentioned that Antimicrobial resistance (AMR) is a 'silent pandemic' and is a global public health threat.**

- **Centre for Science and Environment (CSE) is also going to promote Ethnoveterinary medicine (EVM) for treating animals.**

Ethnoveterinary medicine (EVM) involves the use of traditional / herbal preparations in treating diseases of cattle.

World Antimicrobial Awareness Week (WAAW):
- **Celebrated On:** November **18-24** globally.
- **Aim**: To create awareness and understanding on the issue of Antimicrobial drugs by Humans and Animals.
- **Theme:** Preventing Antimicrobial Resistance Together, which highlights the importance of strengthening preventive measures to address AMR by working together through a **'One Health' approach.**

⊙ **KEY POINTS:**

- Increasing use of antibiotics and infectious diseases are becoming difficult to treat.
- According to a study, some 4.95 million deaths were associated with, and 1.95 million deaths directly attributable to bacterial AMR across the world in 2019.
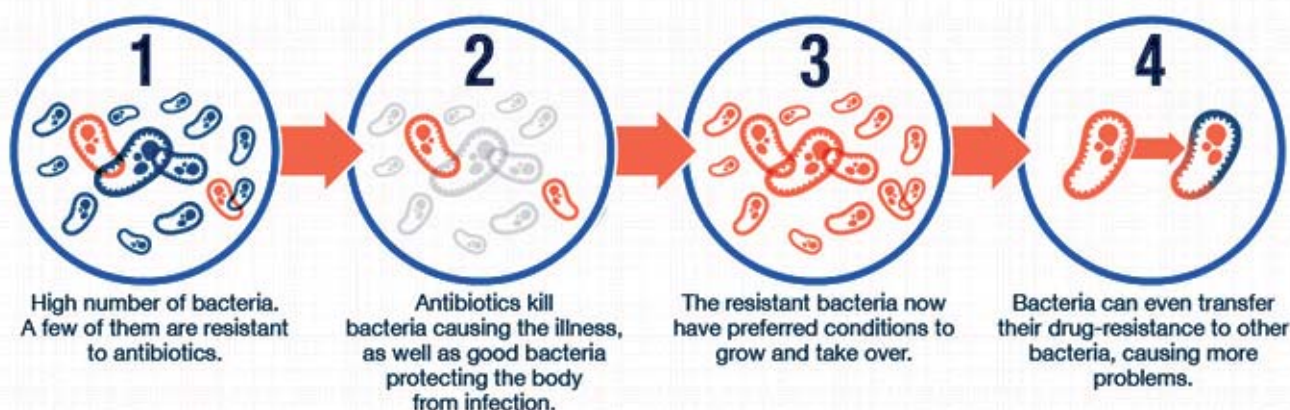- Apart from health, AMR is also likely to heavily impact livelihood and economies.

What is Antimicrobial Resistance?

- Antimicrobial Resistance is the resistance acquired by any microorganism (bacteria, viruses, fungi, parasite, etc.) against antimicrobial drugs that are used to treat infections.

World Health Organisation (WHO) has identified AMR as one of the top ten threats to global health.

Factors Responsible:

- Antibiotic consumption in humans
- Access to antibiotics without prescription
- Lack of knowledge about when to use antibiotics
- Steroidal injection to Animals
- Anti-microbial drugs to animals
- Untreated disposal of sewage water bodies

How does antibiotic resistance occur?

1 High number of bacteria. A few of them are resistant to antibiotics.

2 Antibiotics kill bacteria causing the illness, as well as good bacteria protecting the body from infection.

3 The resistant bacteria now have preferred conditions to grow and take over.

4 Bacteria can even transfer their drug-resistance to other bacteria, causing more problems.

Recent Government Initiatives:

- **National Programme on AMR containment**: Launched in 2012. Under this programme, AMR Surveillance Network has been strengthened by establishing labs in State Medical College.
- **National Action Plan on AMR**: It focuses on One Health approach and was launched in April 2017 with the aim of involving various **stakeholder ministries/departments.**
- **AMR Surveillance and Research Network (AMRSN):** It was launched in 2013, to generate evidence and

capture trends and patterns of drug resistant infections in the country.

- **AMR Research & International Collaboration:** Indian Council of Medical Research (ICMR) has taken initiatives to develop new drugs /medicines through international collaborations in order to strengthen medical research in AMR.
- **Antibiotic Stewardship Program**: ICMR has initiated Antibiotic Stewardship Program (AMSP) on a pilot project across India to control misuse and overuse of antibiotics in hospital wards and ICUs.
- DCGI had banned 40 Fixed Dose Combinations (FDCs) which were found inappropriate.

ISRO TO ATTEMPT 200TH CONSECUTIVELY SUCCESSFUL LAUNCH OF RH-200 SOUNDING ROCKET

⊚ **CONTEXT:**   **The Indian Space Research Organisation (ISRO) is going to attempt the 200th consecutively successful launch of the Rohini RH-200 sounding rocket.**

RH-200 sounding rocket:

- RH-200 is a **two-stage rocket capable of climbing to a height of 70 km** bearing scientific payloads.
- The **first and second stages of RH-200 are powered by solid motors.**
- For years, the RH-200 rocket had used a **polyvinyl chloride (PVC)-based propellant.**
- The first RH-200 to use a new propellant based on **hydroxyl-terminated Polybutadiene (HTPB)** was successfully flown from the TERLS in September 2020.
  - ⊚ As compared to **PVC-based propellants**, **HTPB-based propellant** is more energetic, has higher mechanical & interface properties, and has fewer defects due to lower processing temperature.
- The '200' in the name **denotes the diameter of the rocket in mm**. Other operational Rohini variants are **RH-300 Mk-II and RH-560 Mk-III.**

What are sounding Rockets?

- Sounding rockets are **one or two-stage solid propellant rockets** used for probing the upper atmospheric regions and for space research.
- Sounding rockets take their name from the nautical term "to sound," which means to take measurements.
- They also serve as easily **affordable platforms to test or prove prototypes** of new components or subsystems intended for use in launch vehicles and satellites.
- The **first sounding rocket to be launched from Thumba** was the American Nike-Apache - on November 21, 1963.
- After that, two-stage rockets imported from Russia (M-100) and France (Centaure) were flown.
- **The ISRO launched its own version - Rohini RH-75 - in 1967.**

> **Rohini (Rocket family):**
> - Rohini is a series of sounding rockets developed by the Indian Space Research Organisation (ISRO) for meteorological and atmospheric study.
> - These sounding rockets are capable of carrying payloads of 2 to 200 kilograms between altitudes of 100 to 500 kms.

Operational sounding Rockets:

- Currently, three versions are offered as operational sounding rockets, which cover a **payload range** of 8-100 Kg and an **apogee range** of 80-475 km.

Section: D
(QUICK BYTES)

CURRENT AFFAIRS

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India took over Chair of GPAI

- India took over the Chair of the **Global Partnership on Artificial Intelligence (GPAI)** from France.
- GPAI is a congregation of **25 member countries**, including the US, UK, European Union, Australia, Canada, France, Germany, Italy, Japan, Mexico, New Zealand, South Korea, and Singapore.
- GPAI is an **international initiative** to support responsible and human-centric development and the use of **Artificial Intelligence.**
  - India joined the GPAI in 2020 as a **founding member.**

Indo-US Military Exercise "Yudh Abhyas 2022"

- India and the US began the 18th edition of their joint training exercise **"Yudh Abhyas 2022"** on in Uttarakhand's Auli.
- Exercise Yudh Abhyas is conducted annually between **India and USA**.
- **Aim:** To exchange best practices, Tactics, Techniques and Procedures between the Armies of the two nations.
- A **Forest Range Officer (FRO)** was brutally killed allegedly by a group of Gutti Koya Adivasis with axes and sickles over a "podu land" issue in Telangana.

The Gutti Koya tribals

About the Tribe:

- The Koyas are one of the few **multi-racial and multi-lingual tribal communities** in India.
- **Koya population** is mostly spread out in the **Eastern ghats** especially southern region of India, particularly in the states of **Telangana, Andhra Pradesh, Odisha and Karnataka.**
- Koyas are one of the major **peasant tribe** of **Telangana.**
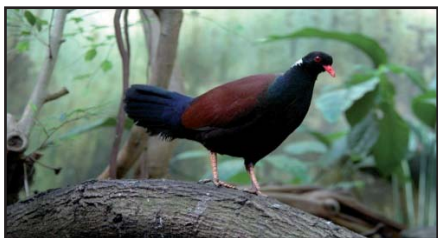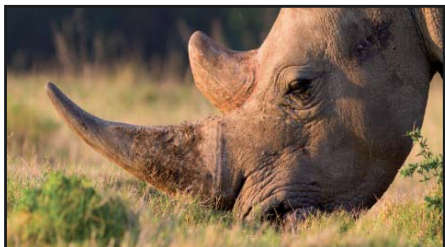- The Koyas speak the **Koya language**, which is a Dravidian language related to **Gondi.**

Karmayogi Prarambh module under Rozgar Mela

- Prime Minister has launched the **Karmayogi Prarambh module**.
  - The module is an **online orientation course** for all new appointees in various government departments.
  - It will include a **code of conduct** for government servants, workplace ethics and integrity, human resource policies and other benefits and allowances.
- As part of the '**Rozgar Mela**', Prime Minister also distributed about 71,000 appointment letters to new recruits.

Tamil Nadu gets its first biodiversity heritage site

- The Tamil Nadu Government issued a notification declaring **Arittapatti, Madurai biodiversity heritage site.**
- Arittapatti village, rich in ecological and historical significance, houses around 250 species of birds including three important raptors -- birds of prey, namely the **Laggar Falcon, the Shaheen Falcon and Bonelli's Eagle.**
- It is also home to wildlife such as the **Indian Pangolin, Slender Loris and pythons.**

- The biodiversity-rich area is surrounded by a chain of **seven hillocks or inselbergs** that serve as a watershed, charging '72 lakes, 200 natural springs and three check dams.

- Several **megalithic structures, rock-cut temples, Tamil Brahmi inscriptions and Jain beds** add to the historical significance of the region.

Indian wildlife biologist honoured with UN's highest environmental award

- Indian wildlife biologist **Dr Purnima Devi Barman** has been honoured with the **UN Environment Programme's (UNEP) 2022 Champions of the Earth award** in the **Entrepreneurial Vision category.**

The Award:

- Since its inception in 2005, the **annual Champions of the Earth award** has been awarded to trailblazers at the forefront of efforts to protect our natural world.

- It is the **UN's highest environmental honour.**

  ➤ To date, the award has recognised 111 laureates: 26 world leaders, 69 individuals and 16 organisations.

Scientists Rediscover Lost Black-Naped Pheasant Pigeon

- Scientists have rediscovered the **black-naped pheasant pigeon**, a rare bird that was last sighted almost 140 years ago in Papua New Guinea.

- The chicken-sized bird is among 20 "lost" birds that have not been sighted for over a century.

- The bird species hasn't been documented by scientists since it was first described in 1882.

- The black-naped pheasant-pigeon is considered critically endangered.

- It is considered native only to Fergusson Island, which is part of the D'Entrecasteaux Archipelago off eastern Papua New Guinea.

Smugglers trafficking rhino horns with impunity: report

- The seizure of rhino horns by weight has increased.

  ➤ **Lucrative:** In the black market, rhino horn princes can fetch up to $400,000 per kg for Asian rhino horns and $20,000 per kg for African rhino horns.

- There are five species and 11 subspecies of rhino.

  ➤ **White, Black, Indian, Javan, and Sumatran** make up the five species of rhino in the world.

- The Indian rhino is the largest of the rhino species.

- It is identified by a single black horn and a grey-brown hide with skin folds.

- **Protection Status**

  ➤ **IUCN Red List:** Vulnerable

  ➤ **CITES:** Appendix I

  ➤ **Wildlife Protection Act, 1972:** Schedule I

- White and black rhinoceros are native to Africa.

- Indian, Javan and Sumatran can be found in India and Asia.

	Conservation status of the four species
	• **Javan Rhinos (*Rhinoceros sondaicus*):** Critically Endangered
	• **Sumatran rhinos (*Dicerorhinus sumatrensis*):** Critically Endangered
	• **Black rhinos (*Diceros bicornis*):** Critically Endangered
	• **White rhinos (*Ceratotherium simum*):** Near Threatened

	Antimicrobial Stewardship Programme
	
	• Apollo Hospitals announced the launch of an **Antimicrobial Stewardship Programme (ASP)** at a national level.
	
	• The programme will sensitise care providers on **Antimicrobial Resistance (AMR).**
	  ➤ AMR is an issue leading to a public health problem that is one of humanity's top ten global public health threats today.
	  ➤ AMR occurs when bacteria, viruses, fungi and parasites mutate over time and are no longer affected by medicine against them.

	Start-up develops indigenous 3D bioprinter
	
	• A startup co-founded by an IIT Madras alumnus has built a 3D printer that can print human tissues.
	
	• **"3D Bioprinting"** or "**bioprinting"** is a form of **additive manufacturing** that uses cells and biomaterials instead of traditional metals and plastics to create 3D constructs that are functional 3D tissues
	
	• Bioprinting uses biomaterial and **"bio-inks"** to create functional human tissues such as skin and entire organs.
	  ➤ Bio-ink is a combination of living cells and a compatible base, like collagen, gelatine, hyaluronan, silk, and alginate.
	
	• **Application:**
	  ➤ Medicine and Bio-engineering
	  ➤ Pharmaceutical testing and reduced need for animal trials
	  ➤ Cosmetic surgery

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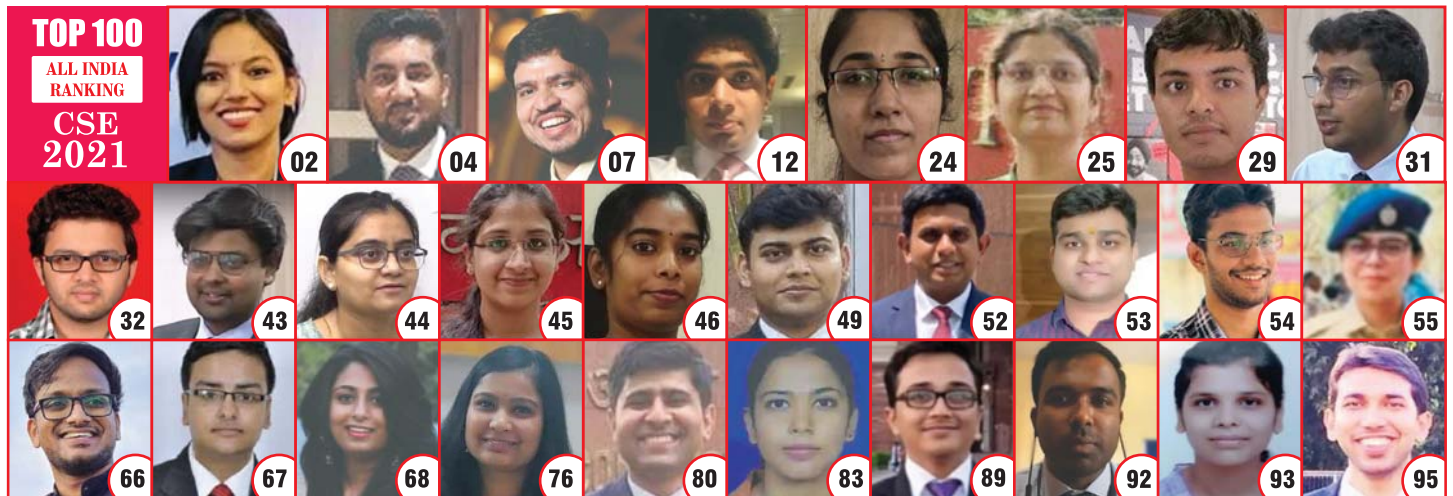**ENGLISH & हिन्दी माध्यम**
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30 | 33 | 38 | 39 | 42 | 44 | 46 | 53 | 54 | 59 | 66 | 69
70 | 72 | 77 | 78 | 80 | 82 | 84 | 86 | 87 | 94 | 97 | 98