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- ✔ Cooperative Model
- ✔ Girls Adoption Outstrips Boys
- ✔ Foreign Contribution (Regulation) Amendment Rules 2022
- ✔ Sub-Categorization of OBCs
- ✔ Minorities Status of Religious/Linguistic Communities
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- ✔ First Leaders' Summit of I2U2
- ✔ First Meeting of Multi-Agency Maritime Security Group (MAMSG)
- ✔ Forest (Conservation) Rules, 2022
- ✔ EIA Rules Amended



From Director's Desk,...



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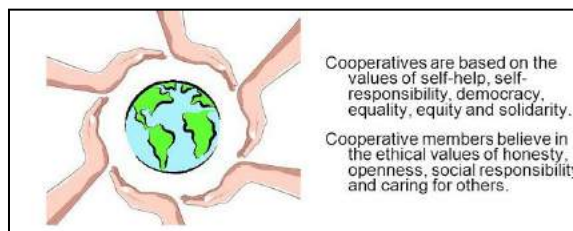
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Union Cooperation Minister Amit Shah has called the cooperative model a 'middle path' of economic development. He termed Capitalism and Communism as extreme models of economic development which have caused unbalanced development. He was addressing an event to mark the 100th International Day of Cooperatives.

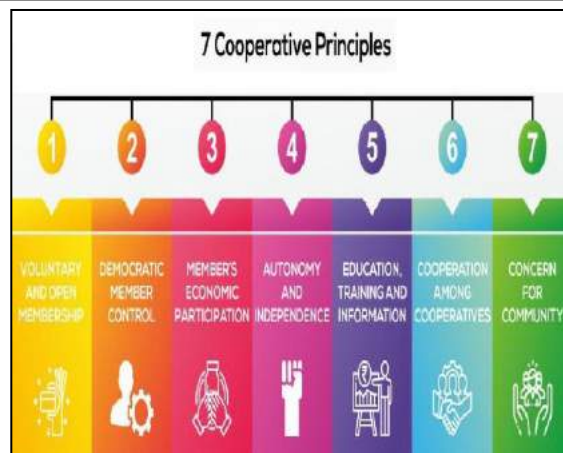
What Are Cooperatives

- Cooperatives are people-centred enterprises owned, controlled and run by and for their members to realise their common economic, social, and cultural needs and aspirations.
- There are about **8.54 lakh cooperative societies**.
- They include 95,000 Primary Agricultural Cooperative Societies, **both credit and non-credit**. Currently, only **63,000 PACs are operational**.
- **Maharashtra has the highest number** of cooperative societies in the country.



Regulation of Cooperatives

- The item "Cooperative Societies" is in the State List (via entry 32).
- However, multistate cooperative societies are regulated by the **Multi State Cooperative Societies (MSCS) Act, 2002**.
 - ✓ No state government official can exercise any control on multistate cooperative societies.
- In 2002, the then govt announced a National Policy on Cooperatives to support the promotion and development of cooperatives.
 - ✓ The central govt is planning to bring a new cooperative policy soon.
- In July 2021, a new **Ministry of Cooperation** was created for cooperative societies in the country. It has been created with the vision of 'Sahakar se Samridhi' (Prosperity through Cooperatives).



97th Constitutional Amendment And Cooperatives

- The 97th constitutional amendment was passed by Parliament in December 2011.
- It dealt with issues related to effective management of co-operative societies in the country.
 - ✓ It had amended Article 19(1)(c) to give protection to the cooperatives and inserted Article 43B and Part IXB, relating to them.
- In July 2021, Supreme Court quashed part of the 97th amendment.
 - ✓ It held that the Parliament could not have introduced a law regulating cooperative societies within states, without first getting it ratified from half of the state legislatures.
- However, the SC stated that the act will remain valid with regard to multistate cooperative societies.

Success Stories

- In 2020-21, Amul's group turnover has crossed Rs. 53 thousand crore and 36 lakh farmer families are associated with it, and it has especially empowered women.

- In 1959, Jaswantiben Popat started Lijjat Papad. In 2019, her business was more than Rs.1,600 crore and around 45,000 women are associated with Lijjat's cooperative movement.
- IFFCO, as a society was formed in 1967 and today it has grown by making more than 36,000 cooperative members. It has worked to give a new direction to the Green Revolution.

Key Highlights Of The Speech

- **Significance of cooperatives highlighted:** Mr Amit Shah said that the cooperatives accounts for



- So, cooperatives are an important tool to promote **inclusive development**.

Challenges Associated

- **Excessive Cooperative Legislations:** Cooperatives in India function in different sectors. “Cooperatives” is a State subject and State cooperative laws and their implementation vastly differ.
- **Political Interference:** This is the biggest problem faced by Sugar cooperatives in Maharashtra.
- **Lack of Coordination:** Different cooperatives, at different level, don't coordinate amongst themselves; making the work of cooperatives difficult.
- **Non-accountability:** The government gave too many benefits to cooperatives, but then there was no further accountability which led to these cooperatives becoming more and more lethargic and inefficient.
- **Vested Interest of Some People:** Many times people, who are in control of cooperatives, are actually people who have joined cooperatives for personal gains.
- **Functional Weakness:** The Co-operative Movement has suffered from inadequacy of trained personnel. Also, they have been unable to attract and retain competent professionals.
- **Internal Free Rider Problem:** New members who provide very little capital enjoy the same benefits as long-standing or founding members who have major investments in the cooperative.
- **No Balanced Growth:** The cooperatives in northeast areas and in areas like West Bengal, Bihar, Orissa are not as well developed as the ones in Maharashtra and the ones in Gujarat.
- **Lack of Efforts for Capital Formation** particularly that concern enhancing member equity & member stake.
- **Instances when credit societies have launched ponzi schemes taking advantage of these loopholes:** Fly-by-night operators get people to invest and, after a few instalments, wind up their operations.
- **Mismanagement and Manipulation:** A hugely large membership turns out to be mismanaged unless some secure methods are employed to manage such co-operatives.
- **Irresponsibility and Unaccountability:** Serious inadequacies in governance including that related to Boards' roles and responsibilities. The people on the board are not held accountable for many inconveniences.
- **Lack of Awareness:** People are not well informed about the objectives of the Movement, rules and regulations of co-operative institutions

Key Suggestions on New Cooperative Policy

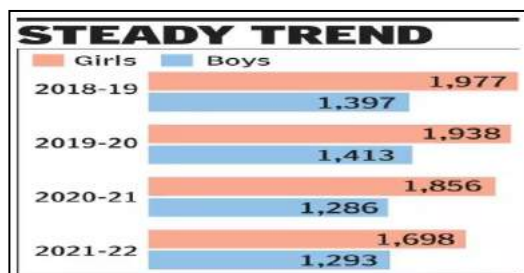
- **Foreign Direct Investment:** Allow FDI in cooperative sector, particularly in PACS to improve infrastructure.
- **Upper age limit:** Fix an upper age limit of 70 years for board members in cooperative societies.
- **Technology upgradation:** Creation of a technology upgradation fund.
- **Land available with PACS** can be leveraged for expanding the resource base of cooperative societies. PACS have more land than the Railways.

- **Sahakar se Bajar:** PACS should be given better market linkages under the label “Sahakar se Bajar ” (cooperative to market).
- **Electronic voting** to be implemented in cooperative societies.
- **Lease to private company:** Storage facilities available with PACS to be leased out to private e-commerce operators.



No. Of Girls Adopted In India Outstrips Boys

Of the 2,991 domestic ‘in-country’ adoptions made between 2021 and 2022, as many as 1,698 were girls. A closer look at the data from 2013-14 onwards, uploaded on the website of the **Central Adoption Resource Authority (CARA)**, confirms that more girls are given for adoption in India than boys.



- While this indicates that more couples are willingly adopting girls and shows a change in mindset, it also brings into focus the fact that *often there are many more girls who are abandoned at birth than boys.*

Legal Provisions

- In India, two legislations deal with the adoption of a child:
 - ✓ The Hindu Adoption and Maintenance Act, 1956 (HAMA)
 - ✓ The Juvenile Justice (Care and Protection of Children) Act, 2015
 This includes Juvenile Justice (Care and Protection of Children) Model Rules, 2016 and Adoption Regulations, 2017.

Juvenile Justice (Care and Protection) Amendment Act 2021 provides that instead of the court, the district magistrate has the authority to issue adoption orders.

- CARA functions as the nodal agency for adoption in India and inter-country adoptions.
- A database of children and registration of prospective parents is done on a centralised Child Adoption Resource Information and Guidance System (**CARINGS**), which is maintained by CARA.

Central Adoption Resource Authority (CARA)

- It is a statutory body established under **Juvenile Justice Act, 2015**.
- CARA is designated as the Central Authority to deal with inter-country adoptions in accordance with the provisions of the **Hague Convention on Inter-country Adoption, 1993**.

Who can be adopted?

- An orphan, abandoned, or surrendered child who has been declared legally free for adoption by the Child Welfare Committee (CWC) can be adopted.
 - This only happens under the provisions of the JJ Act 2015.
- If someone has information about a child in need of care, then they must contact one of the agencies: Childline 1098, or the district Child Welfare Committee (CWC), District Child Protection Officer (DCPO). Following this, the CWC will assess the child and place him or her in the immediate care of a Specialised Adoption Agency. Prospective parents should register themselves with CARINGS of CARA. The parents take in the child for pre-adoption foster care and the SSA files the petition.
- A child of a relative — paternal uncle or aunt, a maternal uncle or aunt or paternal and maternal grandparents — can be adopted.
- According to CARA, children of the spouse from earlier marriage surrendered by the biological parent(s) can also be adopted by the step-parent.

Child Adoption During Covid-19 Pandemic

- According to UNICEF, India has 2.96 crore orphaned or abandoned children.
- In its annual report 2020-21, the Ministry of Women and Child Development noted that 2.56 lakh children were living in 7,164 Child Care Institutions (CCIs) in the country.

Reasons Behind Low Level Adoption In India

• Long And Rigorous Adoption Process

- ✓ First, orphaned or abandoned children must be brought before the District Child Welfare Committee and placed in a CCI under the Juvenile Justice Act of 2015.
- ✓ An effort is then made to track their immediate or extended families and reunite them; if this fails, the child welfare committee, a quasi-judicial body, has to deem the child legally free for adoption.
- ✓ The District Child Protection Unit (DCPU) links them to an adoption agency and the child is registered with CARA.
- ✓ A medical report is prepared and the child is then matched with a prospective parent after a home study is undertaken by CARA authorities.

• Not Enough Children Available For Adoption

While some 28,000 prospective parents have currently registered to adopt, less than a tenth the number of children (2,200) are legally free for adoption.

Suggestions

- Reforms are needed to bring in more children from CCIs into the adoption pool. For this, there is need to shorten the inordinate waiting time: some of these prospective parents had registered with CARA as early as 2018.
- There is a need to develop processes to ensure that child welfare committees bring every possible child into the legal adoption pool and ensure that the kids are not stuck in CCIs.



Foreign Contribution (Regulation) Amendment Rules, 2022

Ministry of Home Affairs notified the **changes in Foreign Contribution (Regulation) Act (FCRA) and its rules**. The **law sought to regulate foreign donations to individuals and organizations** so that they could act in accordance with the values of a sovereign democratic republic.

Foreign Contribution Regulation (Amendment) Act 2020

- It was first enacted in **1976**. Later on, it was amended in 2010 and subsequently in 2020 where by new measures were introduced each time.
- All such NGOs who intend to receive foreign funding are required **to get registered themselves under FCRA**. In **2015**, MHA notified a new rule which requires NGOs to **mandatorily give an undertaking** that the acceptance of foreign funds is not likely to prejudicially affect the sovereignty and integrity of India or impact friendly relations with any foreign state or communal harmony.
- In **2017**, the government through a **finance act** paved the way for political parties to receive foreign funding outside the ambit of FCRA. This action of government was criticized because it is discriminatory and non-transparent in nature.

- **FCRA Amendment 2020**

- ✓ Expansion of definition of public servant to bar them from foreign funding.

The Act prohibits the receipt of foreign funds by Candidates for elections, Journalists or newspaper and media broadcast companies, Judges and government servants, Members of legislature and political parties or their office-bearers, and Organisations of a political nature.

- ✓ Prohibition of transfer of foreign contribution from NGO to any other person/organization.
- ✓ Mandatorily having “FCRA account” designated in SBI branches, Delhi for receiving foreign contribution.
- ✓ Reduction in use of foreign contribution for administrative expenses from 50% to 20%.
- ✓ As per FCRA 2010, the government may suspend the registration of a person for 180 days in case of non-compliance of FCRA. However, FCRA amendment 2020 adds that such suspension may be extended up to an additional 180 days.
- ✓ Making Aadhaar mandatory for registration, while in case of a foreigner, they must provide a copy of the passport or the Overseas Citizen of India card for identification.
- ✓ Insertion of Rule 9 – which deals with obtaining registration or prior permission to receive foreign funds and stop utilisation of foreign funds through enquiry.

- The Government came up with new Rules in **Nov’ 2020**. The new rules made new FCRA registrations more stringent.

- ✓ Any organisation that wants to register itself under FCRA shall be in existence for three years.
- ✓ Further, it should have spent a minimum amount of ₹15 lakh on its core activities for the benefit of society during the last 3 financial years.
- ✓ However, the rules for declaring an organisation as a “political organisation” have been relaxed, with student, farmer, worker and youth organisations being exempted unless they participate in “active politics or party politics”. Political organisations can’t receive foreign funds.
- ✓ Any organisation seeking prior permission for receiving a specific amount from a specific donor for carrying out specific activities or projects will have to submit a specific commitment letter from the donor indicating the amount of foreign contribution & the purpose for which it is proposed to be given.
- ✓ If the value of foreign contribution is over Rs 1 crore, it may be given in installments. However, the second and subsequent installment shall be released after submission of proof of utilisation of 75% of the foreign contribution received in the previous installment.

- MHA in **January 2021** again laid out a series of guidelines and charter to make NGOs and banks comply with new provisions of the amended FCRA.

- ✓ The charter for banks says that “donations received in Indian rupees” by NGOs from “any foreign source even if that source is located in India at the time of such donation” should be treated as “foreign contribution”.
- ✓ Also, it stated foreign contribution has to be received only through banking channels and any violation by the NGO or by the bank may invite penal provisions of FCRA.

New Changes Made In FCRA

- **Remittances:** Now it **will allow Indians to receive up to ₹ 10 lakh in a year** from relatives staying abroad without informing the authorities. The earlier it was ₹ 1 lakh.
 - ✓ If the amount exceeds, the individuals will now have 90 days to inform the government instead of 30 days earlier.

- ✓ Political parties, legislature members, election candidates, judges, government servants, journalists and media houses among others will **no longer be prosecuted** if they receive foreign contribution from relatives abroad and fail to intimate the government within 90 days.
- **Offences:** Made five more offences under the FCRA “compoundable”, making 12 (earlier 7), instead of directly prosecuting the organisations or individuals. The amount of penalty ranges from ₹ 10,000 to ₹ 1 lakh or 5% of foreign funds, whichever is higher.
- **Application of obtaining 'registration' or 'prior permission':** It **now gives NGOs 45 days** (instead of 30 days under the earlier rule), to intimate the Union Home Ministry about **one or more bank accounts** opened for utilisation of foreign funds received.
- **Bank account changes:** Time limit has now been increased from 15 days to 45 days, where NGOs were required to inform the ministry if there was a change in bank account, name, address, purpose, objectives or key members.
- **Transparency:** Anyone receiving foreign funds under the FCRA will now be required to comply with the existing provision of submitting an audited statement of accounts on receipts and utilisation of the foreign contribution for each fiscal year.
 - ✓ As a result, a provision requiring an NGO or individual receiving foreign funds to declare such contributions on its official **website every quarter has been repealed.**

Conclusion

- The purpose of **remittance discount is to stop the outflow of money** and on the other hand to increase inward remittances.
- The **increase in the remittance limit will increase the inflow of money into India** which will also stabilize the foreign exchange reserves and currency.
- Amendments in declaration timings, changes in bank account details, etc. are being done to **reduce the compliance burden**.



Sub-categorisation of OBCs

- The Centre government extended the tenure of **Commission to Examine Sub-categorisation of Other Backward Classes (OBCs) headed by Justice G Rohini**.
- The Commission now has until January 31 2023, to submit its report.
- It was **set up by the President in October 2017 under Article 340** of the Constitution.

Terms Of Reference Of The Commission

- To **investigate the extent of inequitable distribution** of “reservation benefits” among castes or communities in the broad category of OBCs.
- To **develop the mechanism, criteria, norms and parameters** for sub-categorisation within such OBCs using a scientific approach.
- To **begin the process of identifying and classifying** the respective castes, communities, sub-castes in the Central List of OBCs.
- To **review various entries in the Central List of OBCs** and recommend changes to any repetitions, ambiguities, inconsistencies, or spelling or transcription errors (added in 2020).

About Sub-Categorisation of OBCs

- OBCs are granted **27% reservation in jobs and education** under the central government.
- The sub-categorisation is being demanded **as a handful of total communities get a major chunk of the reserved jobs and seats in educational institutes.**
- 10 States/UTs have already sub-categorised OBCs: Andhra Pradesh, Telangana, Puducherry, Karnataka, Haryana, Jharkhand, West Bengal, Bihar, Maharashtra, and Tamil Nadu.

What Have Been Commission's Findings So Far?

- According to 2018 data, **just 10 OBC communities have taken 25% of reserved central jobs and institutional seats.**
- Also, **97% of the reserved jobs and seats have gone to 25% of OBC sub-castes.**
- As many as 983 (**37% of 2,600**) communities under OBC category have zero representation in jobs and institutes.
- **994 OBC sub-castes have a total representation of only 2.68% in recruitment and admissions.**

History of OBC Reservations

- **Kalelkar Commission, set up in 1953**, was the 1st to identify backward classes other than the Scheduled Castes and Scheduled Tribes at the national level.
- **Mandal Commission report of 1980** estimated OBC population at 52% and classified 1,257 communities as backward. It recommended increasing the existing quotas, which were only for SC/ST, from 22.5% to 49.5% to include the OBCs.
- In **1991 a 10% quota was introduced** for the “economically backward sections” among the forward castes. Supreme Court struck this down in *Indra Sawhney vs Union of India case*, where it held that the Constitution recognised only social & educational & not economic backwardness.
- The **central government reserved 27% of seats in union civil posts and services** for OBCs [Article 16(4)]. The quotas were subsequently enforced in central government educational institutions [Article 15 (4)].
- In **2008**, the Supreme Court directed the central government to **exclude the creamy layer (advanced sections) among the OBCs.**
- In 2015, the **National Commission for Backward Classes (NCBC) recommended** that OBCs should be classified into extremely backward classes, more backward classes and backward classes.
 - ✓ The 102nd Constitution Amendment Act, 2018 provided constitutional status to NCBC, which was previously a statutory body under Ministry of Social Justice and Empowerment.

Challenges in Sub-categorisation

- At present it is a major challenge to identify the most disadvantaged among the population eligible for so called reservation. This is mainly because **there is a lack of reliable nationwide data on caste.**
- **The Socio-Economic Caste Census (SECC) of 2011** also does not give a true picture of the socio-economic disadvantages faced by different caste groups.
- **Political issue:** The regional parties championing the interests of dominant OBC castes are likely to oppose such sub-categorisation.

Way Forward

- We have to **do proper OBC enumeration** so we can sub-classify.
- It should be **practical and appropriate** so as to lead to beneficial results. Sub-categorization into different categories **should not hurt the sentiments of any group.**



Minority Status Of Religious, Linguistic Communities is State-dependent: SC

- The Supreme Court said that the religious and linguistic minority status of a community is to be decided on the basis of the state's population.
- The SC court made this observation while hearing a petition filed by a Mathura resident, Devkinandan Thakur. As per the petition, followers of Judaism, Bahaism and Hinduism are the real minorities in various state. They cannot establish and administer educational institutions of their choice because of non-identification of 'minority' at State level.
- The petitioner challenged the provisions of the National Commission for Minorities (NCM) Act, 1992 and National Commission for Minorities Educational Institutions (NCMEI) Act, 2004.

About Minorities In India

- The term Minority is not defined in the Indian Constitution. However, the Constitution recognises only religious and linguistic minorities.

Religious Minorities

- **The basic ground for a community to be nominated as a religious minority is the numerical strength of the community.**

Linguistic Minorities

- **Class or group of people whose mother tongue is different from that of the majority groups is known as the linguistic minorities**

- As per Census 2011, the percentage of minorities in country is about 19.3% of total population.
- The population of Muslims are 14.2%; Christians 2.3%; Sikhs 1.7%, Buddhists 0.7%, Jain 0.4% and Parsis 0.006%.
- As per 2011 census, Hindus have become a minority in Lakshadweep (2.5%), Mizoram (2.75%), Nagaland (8.75%), Meghalaya (11.53%), J&K (28.44%), Arunachal (29%), Manipur (31.39%), and Punjab (38.40%).

About Religious Minorities

- The **central government decides** who gets the minority community status in India under the **National Commission for Minorities Act, 1992**. Only those belonging to the communities notified under Section 2(c) of 1992 Law are regarded as minority citizens.
- The **central government has notified only six communities** as minority at the national level.
- Five of them - **Muslims, Christians, Sikhs, Buddhists and Parsis** - were declared minority communities in October 1993. In January 2014, the Centre added Jains to the list.
- **States generally don't have their separate lists of minority communities.**
- But there are exceptions. For example, Maharashtra has notified Jews as a minority community in state.

Constitutional Provisions For Minorities

- The subject of **identification of minority community is on the Concurrent List**.
 - ✓ **Article 246** of the constitution read with Entry 20, 'Economic planning and social planning', of the concurrent list of 7th schedule to enact laws to *promote and protect the interests of minorities*.
- **Article 29** - It protects the interests of the minorities by making a provision that any citizen / section of citizens having a *distinct language, script or culture* have the right to conserve the same.

- **Article 30** - It says all minorities, whether based on religion or language, shall have the right to establish and administer educational institutions of their choice.
- **Article 350(B)** - There shall be a Special Officer for linguistic minorities to be appointed by the President.

Various SC Judgements Dealing With Minorities

- **DAV College vs State of Punjab 1971** -The court held that the Arya Samaj, who were Hindus, were a religious minority in the state of Punjab, even though they may not have been so in relation to the entire country.
- **TMA Pai Case 2003** - The 11-judge bench of the apex Court stated that for the purposes of Article 30, religious and linguistic minorities have to be *considered state-wise*.
- **Bal Patil 2005** - SC in its judgement in 'Bal Patil' referred to TMA Pai ruling. In this judgement, the court said that henceforth the unit for determining status of both linguistic and religious minorities would be *state*.
- **Inamdar Case 2005** - The SC said that Minority whether linguistic or religious is to be determined by the *demography of state*.

Steps Taken by Government for Minorities

- **Ministry of Minority Affairs** - It was created in 2006 to ensure a more focused approach towards issues relating to the minorities.
- **Prime Minister's 15 Point Programme for the Welfare of Minorities** - Objective of the Programme is to ensure that an appropriate percentage of the priority sector lending should be targeted for the minority communities. It also provides that, wherever possible, 15% of targets and outlays under various schemes should be earmarked for minorities
- **Schemes** - Educational Empowerment Scholarship Schemes, Padho Pardesh Scheme of Interest Subsidy on Educational Loans for Overseas Studies for the Students Belonging to the Minority Communities, USTTAD, Nai Roshni - The Leadership Development of Minority Women.



Boris Johnson Resigned As British PM

Boris Johnson has resigned as leader of Britain's Conservative party, paving the way for selection of a new Prime Minister. He resigned after dozens of Ministers quit his government.

Reasons

- In his short stint as the Prime Minister and even before, Boris Johnson has courted controversy many times.
 - ✓ This ranges from the use of aggressively sexist rhetoric to accepting secret donations for the refurbishment of his private residence at 11 Downing Street.
- The highly damaging "Partygate" scandal then blew up and in April 2022 Johnson became the first PM

1 Immediate Trigger Was The Chris Pincher Affair
 > On June 29, Chris Pincher, Conservative deputy chief whip, got drunk at a club and was accused of groping two men. This incident led to a flurry of allegations, some dating back years. Downing Street claimed Johnson had not been aware of the allegations before Pincher's appointment. But on July 4, it was reported the PM had been aware of a formal complaint. Johnson then admitted he had been told in 2019, and apologised. What followed was cabinet revolt and mass resignations from govt

2 It Started With 'Partygate'
 > The term 'Partygate' was coined to refer to a scandal over parties held in government office, including the Downing Street, in violation of Covid-19 lockdown rules. In April, the PM was fined for breaking pandemic lockdown rules after attending a gathering on his birthday in June 2020. He also apologised for going to a 'bring your own booze' party in Downing St garden. In Dec, the PM told the Commons that 'all guidance was followed in No. 10'. He is being probed if he 'knowingly misled the parliament'

3 A Taxing Crisis
 > Inflation has risen sharply this year to 9.1% currently. Most of the blame goes to Russia's Ukraine invasion, which has led to a rise in oil prices and the cost of food. While the government has taken some steps for relief, it still raised taxes in April, drawing flak

4 Loss Of Vision
 > Getting Brexit done was what helped Boris Johnson come to power. But since then, he has been accused of lack of focus and ideas. His former adviser Dominic Cummings has accused him of being an out-of-control shopping trolley, veering from position to position. In June, Conservative MP and former minister Jeremy Hunt accused Johnson of lacking 'integrity, competence, and vision'

WHAT POWERS DOES JOHNSON STILL HAVE AFTER RESIGNING

found to have broken the law while in office.

- The latest controversy involved accusations of sexual misconduct and excessive drinking by Conservative deputy chief whip.

When Can A British PM Resign

- He could decide by himself that he has lost the support of too many members of his party and the cabinet and resign.
- Several more members of the cabinet could quit and call on the sitting PM to go, almost certainly forcing him to resign.
- If lawmakers become successful in changing the party rules, they can hold vote of confidence.
 - ✓ As per the Conservative party law, once a person wins a confidence vote, he is theoretically safe in his job, and cannot be challenged again in another confidence vote for 12 months.
 - Johnson had won the confidence vote in June 2022.
 - ✓ However, the 1922 Committee (discussed in following section) **reserves the right to change the rules and thus shorten the interval between confidence votes**.

Process Of Finding A Successor

- Now that Johnson has resigned, a process would be held to find a new leader. This process is overseen by 1922 Committee.
 - ✓ The 1922 Committee, also known as "the 22", is a committee of all backbench Conservative MPs that meets weekly when the Commons is sitting.
 - ✓ Its chair, usually a senior MP, is elected by committee members and has considerable influence within the Parliamentary Party.
 - ✓ The Committee serves as a link between rank-and-file Conservative MPs and party leadership.
- The process of finding a successor works as following:
 - ✓ Candidates putting themselves forward for the leadership must be nominated by two other Conservative lawmakers.
 - ✓ Conservative lawmakers then hold several rounds of votes to whittle down the number of candidates.
 - Each time they are asked to vote for their favoured candidate in a secret ballot, and the person with the fewest votes is eliminated.
 - ✓ The final two candidates are then put to a postal ballot of the wider Conservative Party membership, with the winner named the new leader.
 - ✓ The leader of the party with a majority in House of Commons is the de facto Prime Minister.

Electoral system of UK

- The UK is divided into **650 constituencies** and each constituency is represented by one **MP elected in the House of Commons** (the UK's lower chamber of parliament).
- It follows **first past the post system** to decide the winner in each constituency.
- The members of the **upper chamber of the parliament, the House of Lords, are not elected**. The Queen on the advice of the prime minister appoints them.
- To govern, a winning party needs to win more than half of the 650 seats.
- The leader of the winning party is appointed by the Queen as prime minister and forms a Cabinet of senior politicians.

- Alternative Vote (AV) is used to elect the majority of chairs of select committees in the House of Commons.
- It is also used for the election of the Lord Speaker and by-elections for hereditary peers.
- Under AV, voters rank candidates in order of preference by marking 1, 2, 3 and so on next to names of candidates on a ballot paper.
- A voter can rank as many or as few candidates as they like or just vote for one candidate.
- First preference votes are counted first. If a candidate receives more than 50% of the first preference votes then they are elected.
- If no candidate reaches 50%, the candidate with the fewest first preference votes is eliminated. Their second preference votes are reallocated to the remaining candidates. If one candidate has more votes than the other remaining candidates put together, that candidate is elected.

Voting System for the election of Speaker and majority of chairs of select committees

2022 UN Ocean Conference (UNOC)

- United Nations Ocean Conference was held at Lisbon, Portugal. This conference was co-hosted by the Governments of Portugal and Kenya.
- This summit pursued the objective of scaling up solutions to reverse the decline in ocean health and build the sustainable future.
- The conference was held to support the implementation of **SDG 14**.
- **Theme of the conference** - *“Scaling up ocean action based on science and innovation for the implementation of Goal 14: stocktaking, partnerships and solutions”*.

Importance of Ocean

- The ocean covers 70% of the earth’s surface, and is the planet's largest biosphere, and is home to up to 80% of all life in the world.
- It generates 50% of the oxygen we need, absorbs 25% of all carbon dioxide emissions and captures 90% of the additional heat generated from those emissions.
- It is not just ‘the lungs of the planet’ but also its largest carbon sink - a vital buffer against the impacts of climate change.
- It nurtures unimaginable biodiversity and produces food, jobs, mineral and energy resources.

How Man has Impacted Oceanic Ecosystem

- **Habitat Destruction** – All marine habitats have been affected in some way through drilling or mining, dredging for aggregates for concrete and other construction materials, destructive anchoring, removal of corals, and land reclamation.
- **Carbon Emissions** - Since the Industrial Revolution, humans have increased carbon dioxide in the atmosphere to levels that have led to ocean acidification and ocean warming.
- **Chemical and Oil spill** – It affect animals immediately after ingestion or over a long period of time, altering reproductive cycles and other biological processes.
- **Noise Pollution** – Underwater noise from construction, shipping and naval ships significantly affects the natural behaviour of marine species.
- **Plastic Pollution** - Millions of tons of plastic that have entered the ocean in the last 100 years.
- **Overfishing** – This has destroyed local fish stocks, leaving too few adults to breed in the future.
- **Deoxygenation** – increased use of fertilizers for agriculture and Warmer Ocean waters have contributed to ocean eutrophication in some areas of the world. This means there is less dissolved oxygen available to marine life, which can negatively affect biological processes.
- **Bio-magnification**- It is the process where xenobiotic substances are transferred from food to an organism resulting in higher concentrations compared to the source. It is widely believed that this is a general phenomenon for marine food webs. It makes humans more prone to various serious diseases. E.g. Minamata disease.

Sustainable Development Goal 14: Life Below Water

- It was adopted in 2015 as an integral aspect of 2030 Agenda for Sustainable Development and its set of 17 transformative goals.
- It stresses the need to conserve and sustainably use the world’s oceans, seas and marine resources.

- Advancement of Goal 14 is guided by specific targets that focus on an array of ocean issues, including:

- reducing marine pollution
- protecting marine and coastal ecosystems
- minimizing acidification
- ending illegal and over-fishing
- increasing investment in scientific knowledge and marine technology
- respecting international law that calls for the safe and sustainable use of the ocean and its resources

UN Decade of Ocean Science for Sustainable Development 2021 – 2030

The Decade provides a common framework to ensure that ocean science can fully support countries' actions to sustainably manage the ocean and more particularly to achieve the 2030 Agenda for Sustainable Development.

Key Outcome

A. Lisbon Declaration – A Suite Of Science-Based And Innovative Actions

- The Conference adopted the Lisbon Declaration titled - **Our ocean, our future, our responsibility**. It is a *legally non-binding* document.
- The declaration sends strong signal of urgently improving the health, resilience and sustainable use of the ocean.
- In this document, member countries regretted for their failure in achieving targets set for 2020.
- They renewed commitment to take urgent action and cooperate at various levels to achieve all targets without undue delay.

B. Enhancing The Management, Protection And Restoration Of Marine Ecosystems And Biodiversity In Territorial And Extraterritorial Seas

- Since 1870s, almost half of global coral reefs have been lost; and nearly 87% of the global wetlands have disappeared over the past 300 years.
- To address this decline, it was decided to protect at least 30% of ocean by 2030 (30×30 Target).
- While, several states have committed to extend *Marine Protected Areas* coverage in their territorial sea, the **protection of the high seas** remains a critical gap to reach the 30×30 target.
- In this respect, the conference called for the rapid adoption of a *new legally binding agreement* on the conservation and sustainable use of marine biodiversity areas beyond national jurisdiction - BBNJ Treaty.
 - ✓ BBNJ treaty is currently under negotiation at United Nations.
 - ✓ 5th round of negotiations for implementing international treaty is scheduled to be held in August 2022.

C. Preventing, Reducing And Controlling Marine Pollution Which Includes:

- ✓ Nutrient pollution; Untreated wastewater; Solid waste discharges; Hazardous substances; Emissions from the maritime sector, including shipping, shipwrecks; Anthropogenic underwater noise.

D. Creation Of Sustainable Ocean-Based Economies

- Participating members pledged to **develop and promote innovative financing** solutions to help create sustainable ocean-based economies.
- They also decided to *expand nature-based solutions* to help conserve and preserve coastal communities.

E. Empowerment of Women and Girls

- Member nations recognized that their participation is crucial to building a sustainable ocean-based economy and achieving the UN-mandated SDG 14.

F. Improving Fishing Practices & Aquatic Food Production Compliance With Environmental Standards

- FAO's State of **World Fisheries and Aquaculture 2022 (SOFIA)** was released during conference.
- It pointed out a decrease to 64.6% of fishery stocks within biologically sustainable levels in 2019.
- The summit called on the development of sustainable fishing practices and aquatic animal production.
- Also, there was an announcement from Canada, United-States and UK to launch an international alliance to drive collective action to eradicate *Illegal, Unreported And Unregulated (IUU)* fishing.

G. Towards Commitments For Deep-Sea Protection

- The conference raised the alarm about the risks of deep seabed exploitation.
- It encouraged the creation of a "legal framework to stop high seas mining and not to allow new activities that endanger ecosystems".

H. Accelerating The Transition Of Blue Economy of the **Small Island Developing States (SIDS)** has been particularly emphasized.

I. Encouraging and sharing "Science" And "Innovation": The UN Ocean Conference put science at the center of discussions. This is evident from its theme - "Scaling up Ocean Action Based on Science and Innovation for the Implementation of Goal 14".

- To improve our understanding of the ocean and its future evolution, several recommendations have been formulated, including:

- thorough ocean mapping
- development of observation networks
- further transfer of knowledge, capacities and technologies notably between developed countries, SIDS and Least Developed Countries

J. India's Response

At the summit, India committed to a Coastal Clean Seas Campaign and will work toward a ban on single-used plastics (SUPs). SUPs are banned in India since July 1.

Other Conventions Related to Ocean Conservation

- **London Convention, 1972** - The "Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter" is one of the 1st international agreements for the protection of the marine environment from human activities. It has been in force since 1975
- **MARPOL 73/78** - MARPOL refers to marine pollution. It is the International Convention for the Prevention of Pollution from Ships. India is a party to MARPOL 73/78.
 - ✓ Came into force in 1973 and later revised by the protocol in 1978
- **ACCOBAMS** - This refers to the "Agreement on the Protection of Cetaceans in the Black Sea, the Mediterranean Sea and the Contiguous Atlantic Region".

First Leaders' Summit of I2U2

The **first** Leaders' Summit of I2U2 (India-Israel-UAE-USA) was held virtually in July 2022. PM Modi, along with PM of Israel, President of the UAE and President of USA, participated in the Summit.

About I2U2 Group

- ★ I2U2 is a **diplomatic group** of the India, Israel, UAE and United States.
 - US Secretary of State Antony Blinken has used the **I2-U2 moniker for the four-member grouping**.
- ★ The grouping was launched in October 2021 when the first virtual meeting of the foreign ministers of India, Israel, US and UAE took place.
- ★ The new grouping is described as an **international forum for economic cooperation**.
- ★ This grouping is already being termed as a **New Quad' or the 'Middle-Eastern Quad'**.
- ★ **Objective** – To generate synergies that go beyond government level cooperation.

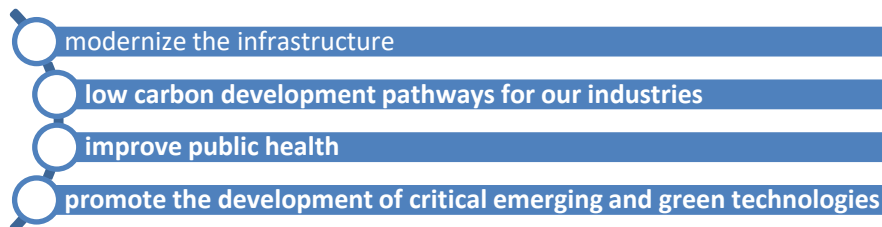
Areas of cooperation

- ★ The grouping will focus on expanding economic and political cooperation in Asia and Middle East through **energy cooperation, trade, transportation, global public health, infra, coordination on vital shared interests and combating climate change**.
- ★ The group **does not have a military angle to it** and it only features cooperation in maritime security.

Key Highlights Of The Summit

1. Objective Of The Summit

- To encourage joint investments in **6 mutually identified areas** such as water, energy, transportation, space, health, and food security.
- It intends to mobilize private sector capital and expertise to help:



2. Focused On Food Security Crisis And Clean Energy

The leaders discussed innovative ways to ensure longer-term, more diversified food production and food delivery systems that can better manage global food shocks.

3. AIM For Climate

- The participating leaders welcomed India's interest in joining the United States, UAE, and Israel in the **Agriculture Innovation Mission for Climate initiative (AIM for Climate/AIM4C)**.
- Launched in November 2021, on the sidelines of CoP26, **AIM4C** is a joint initiative by US and UAE.
- It seeks to address climate change and global hunger by uniting participants to significantly increase investment in climate-smart agriculture and food systems innovation over five years (2021 – 2025).

Key Initiatives Announced At The Summit

Food Security	Clean Energy
<ul style="list-style-type: none"> • The UAE will invest \$2 billion USD to develop a series of integrated food parks across India. 	<ul style="list-style-type: none"> • I2U2 Group will advance a hybrid renewable energy project in India's Gujarat State.

<ul style="list-style-type: none"> • These parks will incorporate state-of-the-art <u>climate-smart technologies to reduce food waste and spoilage, conserve fresh water, and employ renewable energy sources.</u> • India will provide <u>appropriate land</u> for the project and will <u>facilitate farmers' integration</u> into the food parks. • U.S. and Israeli private sectors will be invited to lend their expertise and offer innovative solutions that contribute to overall sustainability of project. • These investments will help maximize crop yields and, in turn, help tackle food insecurity in South Asia and the Middle East. 	<ul style="list-style-type: none"> • The project is consisting of <u>300 MW of wind and solar capacity</u> complemented by a <u>battery energy storage system.</u> ✓ U.S. Trade & Development Agency funded a feasibility study for \$330 million USD project. • Indian companies are keen to participate in this project and contribute to India's goal of achieving 500 GW of non-fossil fuel capacity by 2030. • Such projects have the potential to make India a global hub for <u>alternate supply chains</u> in the renewable energy sector.
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Factors Responsible For New Grouping

Abraham Accord	<ul style="list-style-type: none"> •The new grouping was possible only after the resumption of formal diplomatic relations between Israel and the UAE, through the Abraham Accord. •Under the Abrahamic accords promoted by the Trump Administration, the UAE, Bahrain, Sudan and Morocco set up formal ties with Israel in 2020.
Tackling Turkey's Regional Dominance	<ul style="list-style-type: none"> •The new Quad can be termed as a result of converging interests between India, UAE, and Israel amidst Turkey's assertive claims for the leadership of the Islamic world.
US Pivot to Asia	<ul style="list-style-type: none"> •The summit comes at a time when US is seeking to lessen its footprint in the Middle East as part of its pivot to East Asia to tackle China's rise

Benefits for India

I. More Flexibility To India In The Region

- India has always supported peace and stability in West Asia which is considered as India's extended neighbourhood.
- The new "Quad" will give India the flexibility to engage more freely with Israel and India's partners in the Gulf region. This grouping is also a strong manifestation of the changes in West Asian geopolitics.

II. Diplomacy Shifts From Bilateral To Regional Mechanism

- This platform strengthens India's strategic desire to adopt a regional foreign policy strategy towards West Asia, transcending its bilateralism.
- Earlier, there were three pillars to India's West Asia policy:

Sunni Gulf monarchies

Israel

Iran

- However, with Abraham Accord, the gulf between Sunni kingdoms and Israel is being narrowed.
- As a result, India faces fewer challenges to a regionalist approach.

III. Strategic Interests

- While Israel is a trusted defence partner of India, UAE is amongst the top oil exporters to India.

- With India undertaking an overhaul in its defence infrastructure and the critical energy scenario prevailing in the world, this engagement is quite significant

IV. Technological Hubs:

- Each of these countries is a technological hub. Biotechnology is prominent in each of these countries as well.

Conclusion

- India’s participation in the West Asian Quad brings Delhi in line with other major powers including Europe, China, and Russia to try and engage all parties in the region.
- However, India should also maintain its strong relations with **Iran** to keep a check on the Afghan Taliban and needs a careful balancing act in the Middle East to secure its long-term strategic interests.
- The I2U2 sets the stage for a new and dynamic phase in India’s relations with the Middle East.



First Meeting of Multi-Agency Maritime Security Group

National Security Adviser (NSA) Ajit Doval participated in the **first meeting of the Multi-Agency Maritime Security Group (MAMSG)**. The meeting was chaired by Vice Admiral G Ashok Kumar (retd), the country’s first National Maritime Security Coordinator.

India’s Maritime Security

Multi-Agency Maritime Security Group (MAMSG)

- ▶ MAMSG was formed in November 2021 with an aim to **develop better coordination between different maritime security agencies and ministries of the country.**
- ▶ It works directly under the **National Security Council secretariat (NSCS).**

The **National Security Council (NSC)** is a **three-tiered organization** consisting of Strategic Policy Group (SPG); the National Security Advisory Board (NSAB) and the National Security Council Secretariat.

The council oversees political, economic, energy and security issues of strategic concern.

NSA is the Chairperson of NSC.


- ▶ In February 2022, G Ashok Kumar was appointed as India’s first Coordinator of MAMSG – also known as national maritime security coordinator.

He will have the responsibility of coordinating between all the agencies involved in maritime security and maritime civil issues as well.

He will be the principal advisor to the government on maritime security domain and will act as a nodal point for all issues related to maritime security.

Role

- ▶ The MAMSG is envisaged to.
 - Provide a standing and effective mechanism to ensure coordination of all aspects of maritime security including coastal and offshore security
 - Fill the institutional, policy, technological and operational gaps in meeting present and future security challenges.
- ▶ The group will also address maritime contingencies requiring an urgent and coordinated response



Importance Of Maritime Security

1. Maritime Security Of Vast Coastlines

- India has along 7,516-km coastline, including island territories, and a 2 million sq km Exclusive Economic Zone (EEZ).

- The importance of maritime security was evident following the 26/11 Mumbai terror attack.
- In the changing geopolitical scenario, the Indian Ocean, which has been an ocean of peace, is gradually becoming competitive. The region has the potential to witness clash of interests.

2. Economic And Energy Security

- 90% of India's trade by volume and 70% by value transit through the seas.
- The Indian government is set to clear the **Deep Ocean Mission** for the blue water economy.
- Security at the high seas and economic wellbeing is inextricably linked and all stakeholders must work unitedly.
 - ✓ The more India develops, the more assets it creates, greater would be the vulnerability and the need for security in maritime domain.

3. Geostrategic Need

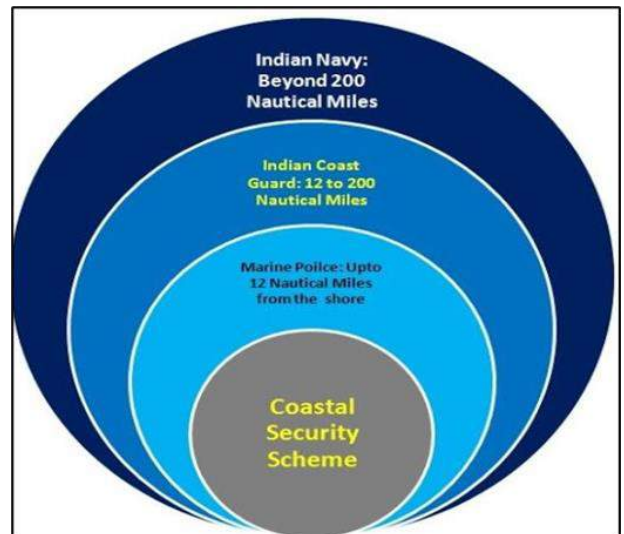
- China is penetrating into the Indian Ocean through Pakistan and Myanmar.
- Enhanced maritime security will give a boost to India's **SAGAR** (*Security and Growth of All in the Region*) doctrine. Under this doctrine, India has envisioned a role of *net security provider* in the IOR.
- A Freedom of Navigation Operations (**FONOP**) was conducted in the Indian Territory in April 2021 by the US.
 - The American Naval cruiser USS John Paul Jones transgressed into the Indian Islands of Lakshadweep, well within India's Exclusive Economic Zone causing a farrago of events.

4. Maritime Borders Are Different From Land Borders

One cannot fence the maritime borders, and disputes in seas are resolved through international norms and laws, while land disputes are bilateral in nature.

Mechanism

- **Coastal border management** was institutionalized in 2004 with the establishment of the Department of Border Management in the MHA.
- However, after the '26/11' attacks, coastal and maritime security underwent a paradigm shift. These included:
 - A **three-tier security grid** the Indian Navy, the coast guard, and the marine police;
 - **Increased electronic surveillance** using Coastal radar chain, Automatic identification system (AIS), Vessel traffic management and information system
 - Establishment of the National Command Control Communication and Intelligence (**NC3I**) Network;
 - **Sagar Prahari Bal** for protecting naval bases has been raised by Navy;
 - Establishment of **Information Fusion Centre – Indian Ocean Region (IFC-IOR)**.



Associated Issues

- There are **no formal or commonly accepted definitions** of concepts like 'maritime security', 'coastal security' and 'coastal defence'. Sometimes, it leads to vagueness.
- **Multiple institutions** are involved and there is lack of coordination.
- **Turf war** between MHA and Ministry of Defence (MoD). Demands are being made to bring Coast Guard under the control of MHA.

- Fishermen are considered as eyes and ears for coastal security. However, **discontent among fishermen community**, politicisation of fishermen issues etc. are further complicating the security architecture.
- Inadequate infrastructure, acute shortage of manpower is posing challenges in providing maritime security in India.

Conclusion

- India is determined to strengthen its maritime security that would protect and support legitimate maritime activities while countering traditional and non-traditional threats in the maritime domain.
- It is evident from the fact that, during India’s presidency of UNSC, **maritime security was deliberated for the first time** in a holistic manner as an exclusive agenda item in a high-level global forum.
 - UN Security Council Open Debate on “Enhancing Maritime Security: A Case for International Cooperation” was held in August 2021 and it was presided over by PM Modi.

Extra Mile

UNSC adopted the first-ever presidential statement on maritime security in August 2021.

Key Highlights Of Open Debate On Maritime Security Held By UNSC

A. **Five-point Agenda** forwarded by PM to enhance maritime cooperation are -

- Removal of barriers to legitimate maritime TRADE
- Promoting responsible maritime CONNECTIVITY
- Conservation of marine RESOURCES
- Fight THREATS from natural disasters, non-state actors
- Resolution of maritime DISPUTES peacefully in accordance with international law

B. **Primacy of the UNCLOS (United Nations Convention on the Law of the Sea)** - An **outcome document**, in this regard, was adopted.

C. **India’s Role as the Net Security Provider** for the Indian Ocean region.

He referred to Indian Navy’s anti-piracy patrolling, India’s support to other nations under **SAGAR Doctrine**, hydrographic survey conducted by India & enhancing maritime domain awareness.

United Nations Convention on the Law of the Sea

- It establishes rules governing all uses of the oceans and their resources. It was adopted in December 1982 and came into force in 1994. India became a signatory to the UNCLOS in 1982.
- It divided marine areas into five main zones - **Internal Waters, Territorial Sea, Contiguous Zone, Exclusive Economic Zone (EEZ) & High Seas.**
- It created three new institutions - The International Tribunal for the Law of the Sea, The International Seabed Authority, The Commission on the Limits of the Continental Shelf.



Forest (Conservation) Rules, 2022

Ministry of Environment Forests and Climate Change (MoEFCC) notified the Forest (Conservation) Rules, 2022, under the Forest Conservation Act, 1980. It has, thus, replaced the Forest (Conservation) Rules, 2003.

The Forest (Conservation) Act (FCA), 1980

Need For FCA

Though the Indian Forests Act is in effect since 1927, it was designed not to preserve forests or combat deforestation, but to allow the Colonial British authority to control timber extraction.

About FCA

- The FCA is the principal legislation that regulates deforestation in the country. It prohibits the felling of forests for any “non-forestry” use without prior clearance by the central government.
- Thus, it creates an institutional mechanism, prescribing procedures for the orderly approval and handing over of forest land to user agencies for diversion for non-forestry purposes.
- These result in deforestation, ranging from “clear felling” to “selective felling” as required by the user agency.
- It is a brief legislation with only five sections -
 - ✓ **Section 1** defines the extent of coverage of the law.
 - ✓ **Section 2** restricts activities in forest areas
 - ✓ The rest deals with the creation of advisory committees, powers of rule-making and penalties.
- The clearance process includes seeking consent from local forest rights-holders and from wildlife authorities. The Centre is empowered to reject such requests or allow it with legally binding conditions.

Forest (Conservation) Rules, 2003.

It had provisions of “clear felling” to “selective felling”.

Environment Ministry’s regional office or the state would process all proposals to use forest land, depending on the extent of forest area to be diverted.

- The Ministry would then consider the advice of a committee set up for this purpose and decide on the proposal.

No such provision

Ministry used to receive forest diversion proposals from agencies together with a submission under the Forest Rights Act (FRA), 2006.

- The FRA overrides the FCA and Rules can’t override or abrogate a law

Forest (Conservation) Rules, 2022

These affirm that “clear felling” is indeed the **removal of all-natural vegetation** from land of size 1 hectare (ha and) above, by felling, burning or uprooting.

- It excludes “selection felling” which was there in the 2003 Rules.

Earlier, workflow was deemed cumbersome and the Ministry has now replaced it with a machinery consisting of a project screening committee, an integrated regional office, a few designated officers and an advisory committee at the Ministry.

- And they are all under the control of the forest bureaucracy.

Tree plantation, dubbed “surrogate forests” in the new Rules, now comes under the section of “compensatory afforestation.”

Compliance with the Forest Rights Act (FRA), 2006, is not at all required for the final approval for forest diversion, given by the Ministry.

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition Of Forest Rights) Act, 2006 or the Forest Rights Act (FRA), 2006

- It recognizes the rights of forest dwelling tribal communities and other traditional forest dwellers to forest resources on which these communities rely for a variety of needs such as livelihood, habitation, and other socio-cultural needs.
- The Act encompasses -
 - **Individual Rights:** Rights of Self-cultivation & Habitation
 - **Community Rights** as Grazing, Fishing and access to Water bodies in forests;

- **Habitat Rights** for Particularly Vulnerable Tribal Groups (PVTGs),
- Recognition of **traditional customary rights and right to protect**, regenerate or conserve or manage any community forest resource for sustainable use, etc.
- **Right To Allocation Of Forest Land For Developmental Purposes** to fulfil basic infrastructural needs of the community.
- In conjunction with the **Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Settlement Act, 2013**, FRA protects the tribal population from eviction without rehabilitation and settlement.
- The Act further enjoins upon the **Gram Sabha and rights holders** the responsibility of conservation and protection of biodiversity as well as to stop any destructive practices affecting these resources or cultural and natural heritage of the tribals.

Objections About The New Rules

- The latest version of rule allows forest land to be diverted to industry without settling questions of the rights of forest dwellers and tribals.
- The FRA makes it mandatory to seek free, prior and informed consent of families who would be affected by such diversion of forest land.
 - The new rules destroyed the very purpose of the FRA as once a forest clearance was granted (in this case by a Centre-constituted Forest Advisory Committee), no claims by forest dwellers and tribals would be recognised and settled.
- The State governments will be under even greater pressure from the Centre to accelerate the process of diversion of forest land.
 - Under the FRA, states are in charge of diverting forests for non-forestry uses and the Union Tribal Affairs Ministry regularly reviewed the implementation of the Act.
- Though permission from the Gram Sabha was not required to divert forest land in the past, its verdict had significant persuasive power.
 - As a result, the new rules **undermined the role of Gram Sabha**, whose approval was required for any large-scale diversion that did not involve linear projects (linear projects are construction of roads, highways, railways and are exempt from Gram Sabha approvals).



EIA Rules Amended

The Ministry of Environment, Forests and Climate Change has notified amendments to the Environment Impact Assessment (EIA) Rules.

Amendments in EIA Rule

- **Strategic and Defence Projects** - Exempted strategic and defence-related highway projects, including those located 100 km from the Line of Control, from the need for an environmental review before construction.
- **Power Plants** – Thermal power plants up to 15 MW based on biomass or non-hazardous municipal solid waste using auxiliary fuel such as coal, lignite or petroleum products up to 15%, have also been given an exemption as long as the fuel mix is eco-friendly.
- **Ports and Harbour Dealing in Fish** with less pollution potential compared to others, and caters to small fishermen, are exempted from environmental clearance.

- **Toll Plazas** – Toll Plaza that need more width for installation of toll collection booths to cater to a large number of vehicles are exempted.
- **Airport** - Expansion activities in existing airports related to terminal building expansion without increase in the airport's existing area, rather than expansion of runways also exempted.

Significance Of The Amendments

- It will improve the investment climate in these sectors.
- It will create jobs and support livelihood especially poor fishermen.
- It will ease the traffic flow on congested highways.
- It will faster the infrastructure development in strategic areas like border areas. Now Char Dham road widening Project in the Bhagirathi eco-sensitive zone stretch will not need EIA clarification.

About EIA

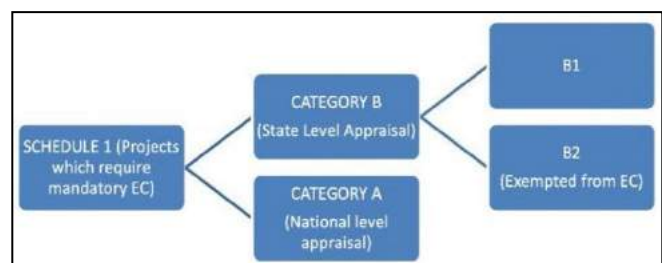
It can be defined as the study to predict the effect of a proposed activity/project on the environment. EIA in India is statutorily backed by the Environment Protection Act, 1986.

Different Stages of EIA Process

- **Screening** - Which projects need a full or partial assessment (EIA) is decided in this stage.
- **Scoping** - This stage identifies the key issues and impacts that should be further investigated. This stage also defines the boundary and time limit of the study.
- **Impact analysis** - This stage of EIA identifies and predicts the likely environmental and social impact of the proposed project and evaluates the significance.
- **Mitigation** - This step in EIA recommends the actions to reduce and avoid the potential adverse environmental consequences of development activities.
- **Reporting** - This stage presents the result of EIA in the form of a report to the decision-making body and other interested parties.
- **Public hearing** - On completion of the EIA report, public and environmental groups living close to the project site may be informed and consulted at this stage.
- The fate of the project is decided. Whether the project is to be given approval or not and if it is to be given, under what conditions. Appraisal means the detailed scrutiny by the Expert Appraisal Committee or State Level Expert Appraisal Committee of the application & other documents for grant of environmental clearance
- ✓ Based on the recommendations of the Expert Appraisal Committee, environmental clearance is accorded or rejected to the project by MoEF&CC.
- **Monitoring and implementation of environmental management plan** - The various phases of implementation of the project are monitored in this stage.

EIA Category A/B

- To decentralize the process of project clearance, the EIA Notification 2006 has categorized the projects into two categories namely;
- Category 'A' and Category 'B' based on their impact potential.
 - Category 'A' projects will be appraised at the Central level while Category 'B' project at the State level.
 - **Category A** projects requires mandatory



environmental clearance and thus they do not have to undergo the screening process.

- **Category B** projects undergo a screening process and are further classified into B1 (Mandatorily requiring EIA) and B2 (Not requiring EIA).

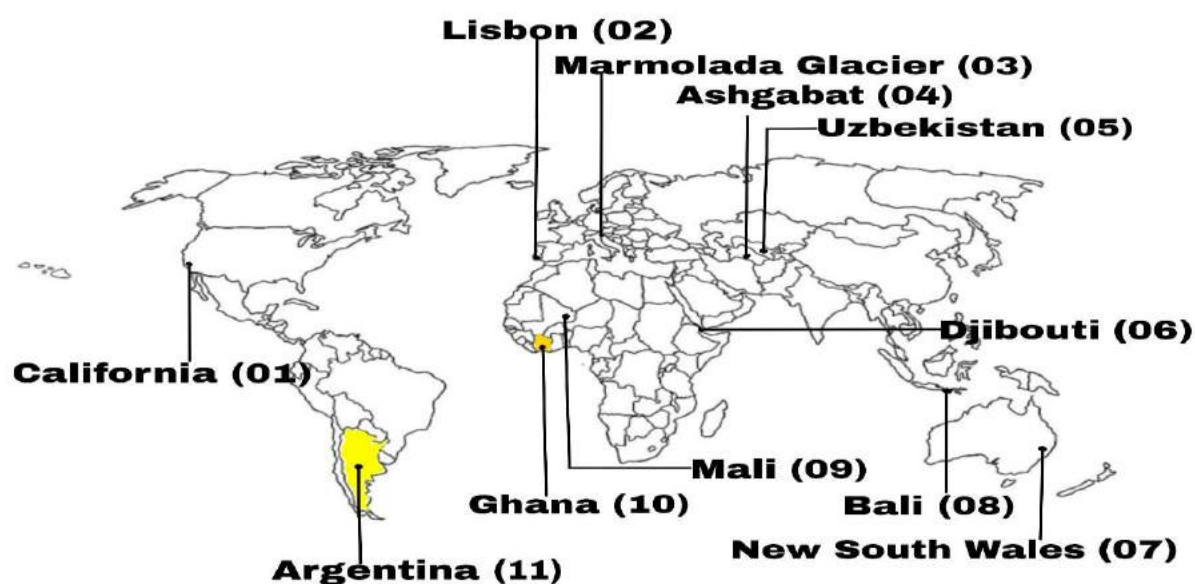
Significance of EIA	Drawbacks of EIA
<ul style="list-style-type: none"> • It links the environment with development for <u>environmentally safe and sustainable development.</u> • It provides a <u>cost-effective way to eliminate or reduce the adverse impact</u> of developmental projects. • It enables <u>decision makers to analyse the impact</u> of developmental activities on the environment before the implementation of the developmental project. 	<ul style="list-style-type: none"> • It is a <u>time-consuming process</u> that may be depicted as withholding the pace of developmental activities. • There is <u>little public participation</u> in actual implementation. • It sometimes focuses <u>too much on the scientific analysis</u> and the real-time impact is neglected. • Impact assessment processes are in place and applied in many countries, yet biodiversity is often inadequately addressed.

Way Forward

- **Sector wide EIA is needed** - There is a need to conduct policy-level and sector-wide EIAs in the form of strategic impact assessments for various sectors including mining, power.
- **Improve quality of EIA reports** -The checklist needs to include agricultural biodiversity, traditional knowledge related to biodiversity and impact on livelihoods.
- **Public Hearings** - Public hearings should be held for all projects that are likely to have environmental and social impact. This should be strictly implemented.

MAPS: PLACES IN NEWS

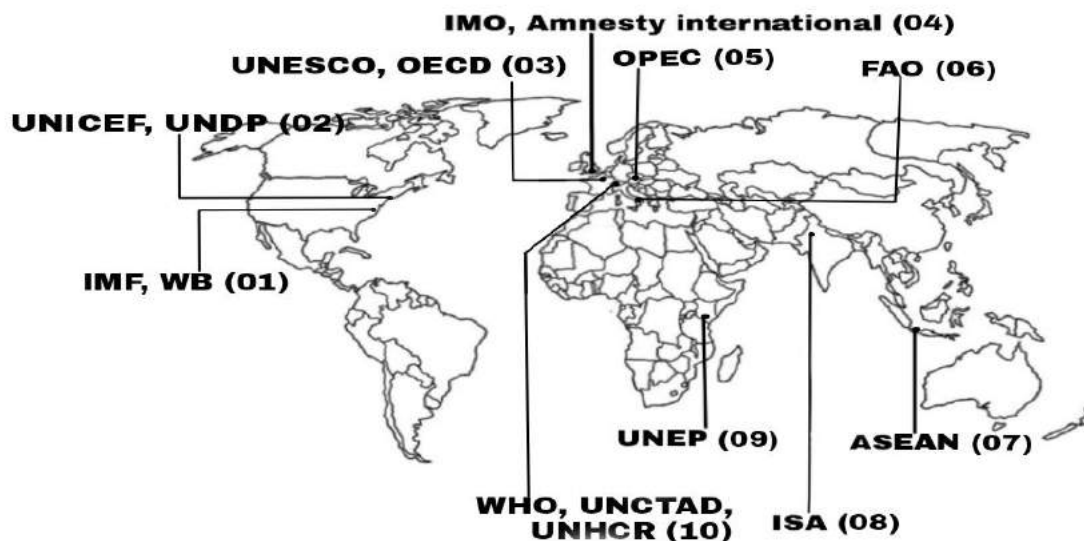
International Places in News



01	California	Recently a wildfire emerged in California, which spread to thousands of acres. It is a western U.S. state which stretches from the Mexican border along the Pacific for nearly 900 miles. Its terrain includes cliff-lined beaches, redwood forest, the Sierra Nevada Mountains, Central Valley farmland and the Mojave Desert.
02	Lisbon	The 2022 UN Ocean Conference, co-hosted by the Governments of Kenya and Portugal, was held at Lisbon . It is the capital and the largest city of Portugal. It lies in the <i>western Iberian Peninsula</i> on the Atlantic Ocean and the River Tagus .
03	Marmolada Glacier	This glacier collapsed in Italy . It is located on mountain Marmolada in Trentino province, Italy. It is the only one of the Dolomites sections of the Alps. This glacier helped the Australian and Italian forces during the World War I.
04	Ashgabat	Ashgabat hosted the 6th Caspian Summit . It is the capital and the largest city of Turkmenistan . It is situated between the Karakum Desert and the Kopet Dag mountain range in Central Asia . It is also near the Iran-Turkmenistan border.
05	Uzbekistan	Recently an unrest broke out in the Uzbekistan's autonomous province of Karakalpakstan . Karakalpak translates to 'black hat', referring to their traditional headgear. Uzbekistan is a doubly landlocked country located in Central Asia . It is surrounded by five landlocked countries Kazakhstan, Kyrgyzstan, Tajikistan, Afghanistan and Turkmenistan . Its capital and largest city is Tashkent. ✓ A landlocked country is entirely surrounded by land, with none of such country's territory being connected to an ocean. However, some of these nations may have coastlines, but these are only on closed seas.
06	Djibouti	Indian Navy stealth frigate INS Tarkash visited Djibouti as a part of its long range oversea deployment. It is a country in the Horn of Africa, bordered by Somalia, Ethiopia, Eritrea, and the Red Sea and the Gulf of Aden . Its land is rich in mineral deposits such as gold, granite, limestone, and marble.

07	New South Wales (capital Sydney)	A tiny parasitic mite, that lives on European honeybee, has been detected in managed bee hives in New South Wales. It is a state on the east coast of Australia. It borders Queensland, Victoria, and South Australia. Its coast borders the Coral and Tasman Seas.
08	Bali	The 7th session of Global Platform (GP) 2022 was organised by the UN Office for Disaster Risk Reduction (UNDRR) in Bali. It is a province of Indonesia and the westernmost of the Lesser Sunda Islands. Bali is part of the Coral Triangle , the area with the highest biodiversity of marine species, especially fish and turtles.
09	Mali	A European military task force that helped Mali's government fight Islamic extremists has formally withdrawn from the country amid tensions with its ruling military junta. Mali is a landlocked country in West Africa . Its capital 'Bamako' is the largest city. It is bounded by Algeria, Niger, Burkina Faso, Cote d'Ivoire, Guinea, Senegal and Mauritania . Niger and Senegal rivers pass through it.
10	Ghana (capital Accra)	Ghana initiated talk with the IMF to support a government Programme. It is a country in West Africa . It adjoins the Gulf of Guinea and the Atlantic Ocean to the south, sharing borders with the Ivory Coast in the west, Burkina Faso in the north, and Togo in the east . Ghana is the 2nd -most populous country in West Africa, after Nigeria.
11	Argentina	Recently, the city of Buenos Aires, Argentina blocked the use of gender-inclusive language in schools. Argentina is a country in the southern half of South America. It is the 2nd-largest country in South America after Brazil . It is bounded by the Atlantic Ocean in the east . Border countries are Chile, Bolivia, Paraguay, Brazil, and Uruguay , and it shares maritime borders with the Falkland Islands .

International Organisation's Headquarters



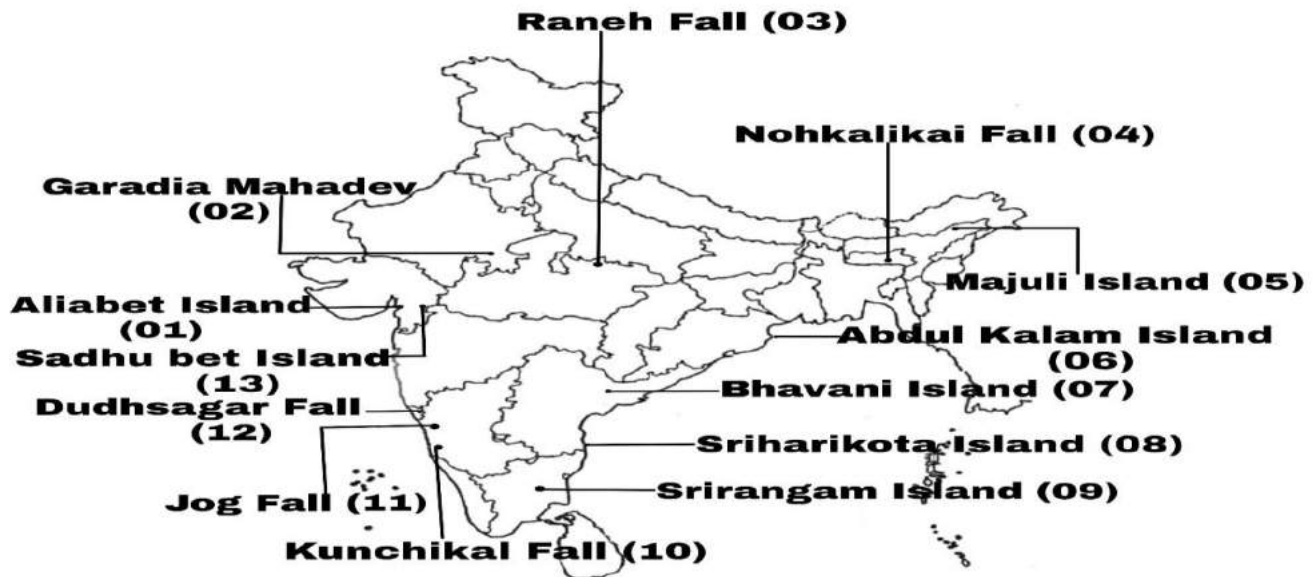
No.	Body	Headquarter	Details
01	IMF (190 members)	Washington, D.C	The International Monetary Fund (IMF) is an international financial institution established to foster global monetary cooperation, secure financial stability, facilitate international trade, <i>promote high employment</i> and sustainable economic growth, and <i>reduce poverty</i> around the world. Formed in 1944 , at the Bretton Woods

			<p>Conference.</p> <p>Report Published: Global Financial Stability Report, World Economic Outlook</p>
	WB (189 members)	Washington, D.C	<p>The World Bank (WB) is an international financial institution that provides loans and grants to the governments of low- and middle-income countries for the purpose of pursuing capital projects. It is the collective name for the International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA). It was established along with IMF at 1944 Bretton Woods Conference.</p> <p>World Bank Group: IBRD, IDA, International Finance Corporation (IFC), Multilateral Guarantee Agency (MIGA), International Centre for the Settlement of Investment Disputes (ICSID)</p> <p>Reports published: World Development Report, Global Economic Prospect (GEP) Report, Remittance Report, Ease of Living Index, India Development Update, Universal Health Coverage Index, The Service Trade Restriction Index</p>
02	UNICEF	New York City	<p>United Nations International Children's Emergency Fund (UNICEF), now officially United Nations Children's Fund, is an agency of the United Nations responsible for providing humanitarian and developmental aid to children worldwide. It was created on 1946.</p> <p>Awarded the Nobel Prize for Peace in 1965 for "promotion of brotherhood among the nations"</p>
	UNDP	New York City	<p>The United Nations Development Programme (UNDP) is a United Nations agency tasked with helping countries eliminate poverty and achieve sustainable economic growth and human development. It emphasizes on developing local capacity towards long-term self-sufficiency and prosperity. UNDP is central to advance the 2030 Agenda for Sustainable Development.</p>
03	UNESCO (193 members)	Paris, France	<p>The United Nations Educational, Scientific and Cultural Organization (UNESCO) is a specialised agency of the United Nations (UN) aimed at promoting world peace and security through international cooperation in education, arts, sciences and culture. It was founded in 1945 as the successor to the League of Nation's International Committee on Intellectual Cooperation.</p> <p>Important Initiatives: World Heritage Convention and List, Man and the Biosphere (MAB) Programme, World Water Assessment Programme (WWAP), International Hydrological Programme (IHP)</p>
	OECD	Paris, France	<p>The Organisation for Economic Co-operation and Development (OECD) is an intergovernmental organization with 38 member countries. It was founded in 1961 to stimulate economic progress and world trade. The members are countries describing themselves as committed to democracy and the market economy. India is not member of OECD</p> <p>Report Published: The Programme for International Student Assessment (PISA)</p>
04	IMO	London, United	<p>The International Maritime Organization (IMO) is a specialised agency of the United Nations responsible for regulating shipping. It was</p>

	(175) members)	Kingdom	established following agreement at a UN conference held in Geneva in 1948 and the IMO came into existence ten years later, meeting for the first time in 1959 (India joined IMO in 1959).
	Amnesty International	London, United Kingdom	It is an international NGO focused on human rights. It draws attention to human rights abuses and campaigns for compliance with international laws and standards. The organization was awarded the 1977 Nobel Peace Prize for its defence of human dignity against torture.
05	OPEC	Vienna, Austria	The Organization of Petroleum Exporting Countries (OPEC) is an intergovernmental organization of 13 countries. Founded in 1960 in Baghdad by the first five members (Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela). Austria is not an OPEC member state. India is not a member of OPEC.
06	FAO	Rome, Italy	The Food and Agriculture Organization is a specialized agency of United Nations that leads international efforts to defeat hunger and improve nutrition and food security. It was founded in 1945. It helps governments and development agencies coordinate their activities to improve and develop agriculture, forestry, fisheries, and land and water resources.
07	ASEAN	Jakarta, Indonesia	The Association of Southeast Asian Nations (ASEAN) is a political and economic union of 10 member states in Southeast Asia . Its primary objective was to accelerate economic growth and through that social progress and cultural development. Member Nations are Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar and Cambodia. <i>ASEAN was established in 1967 with the signing of the ASEAN Declaration (Bangkok Declaration)</i>
08	ISA	Gurugram, Haryana	The International Solar Alliance (ISA) is an alliance of most being sunshine countries , which lie either <u>completely or partly between the Tropic of Cancer and the Tropic of Capricorn</u> . The primary objective of the alliance is to work for efficient consumption of solar energy to reduce dependence on fossil fuels. This initiative was first proposed by Indian PM Narendra Modi in a speech in Nov' 2015 . The alliance is also called International Agency for Solar Policy and Application (IASPA). Out of 106 nations which signed, 86 have signed and ratified the ISA Framework Agreement.
09	UNEP	Nairobi, Kenya	The United Nations Environment Programme (UNEP) is responsible for coordinating responses to environmental issues within the United Nations system. It was established after the United Nations Conference on the Human Environment in Stockholm in June 1972 . It hosts the secretariats of several multilateral environmental agreements and research bodies, including <u>Convention on Biological Diversity (CBD), Minamata Convention on Mercury, Convention on Migratory Species and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)</u> .
10	WHO (194	Geneva, Switzerland.	The World Health Organization (WHO) is a specialized agency of the United Nations responsible for international public health. It was

members)		established in 1948. It provides technical assistance to countries, sets international health standards, and collects data on global health issues. A publication, the World Health Report, provides assessments of worldwide health topics.
UNCTAD	Geneva, Switzerland.	The United Nations Conference on Trade and Development (UNCTAD) was established in 1964 as an intergovernmental organization intended to promote the interests of developing states in world trade. Reports published: Trade and Development Report, World Investment Report, The Least Developed Countries Report, Information and Economy Report, Technology and Innovation Report, Commodities and Development Report
UNHCR	Geneva, Switzerland.	The United Nations High Commissioner for Refugees (UNHCR) is a UN agency mandated to aid and protect refugees, forcibly displaced communities, and stateless people, and to assist in their voluntary repatriation, local integration or resettlement to a third country. It was established in 1950. It won the Nobel Prize for Peace twice (1954 and 1981)

Waterfalls and Island



01	Aliabet Island	It is a small uninhabited island located in Gujarat. It is situated on Narmada River, with an area close to 3.5 acres. It serves as a small stopover for fishermen. It is an off-shore oil well site; about 45 km from Bhavnagar, in the Gulf of Khambat.
02	Garadia Mahadev	It is Rajasthan's very own Grand Canyon. It is situated inside the Mukundra Tiger reserve. The rocky barren land, perched at an elevation of 500m, offers a panoramic view of the Chambal River. Garadia Mahadev Temple is dedicated to Lord Shiva.
03	Raneh Falls	It is a natural waterfall on Ken River, located in Chhatarpur district 20 kms from Khajuraho (Madhya Pradesh). Due to building of dam on the river, the Raneh Falls may disappear in future in spite of already having two dams that eat up much of

		<p>the waterfall.</p> <p>The waterfall is also close to Panna Tiger Reserve and Ken crocodile sanctuary.</p>
04	Nohkalikai Falls	It is the tallest plunge waterfall in India. Its height is 340 metres . It is located in Meghalaya, near Cherrapunji. It is fed by the rainwater collected on the summit of a comparatively small plateau and decrease in power during the dry season, from December to February.
05	Majuli Island	<p>It is a river island in Brahmaputra River, Assam and in 2016 it became the first island to be made a district in India. It had an area of 1,255 square kilometres at the beginning of the 20th century, but having lost significantly to erosion. It covers 352 square kilometres as in 2014.</p> <p>It is the nerve centre of neo-Vaishnavite culture. It has many 'Sattras' (religious and cultural institutions). It is the world's largest river island according to Guinness World Record.</p>
06	Abdul Kalam Island	It is formerly known as Wheeler Island , an island off the coast of Odisha. In 2015, the island was renamed. The Integrated Test Range missile testing facility is located on the island, and serves as the test facility for most of India's missiles.
07	Bhavani Island	It is situated in the midst of Krishna River , at Vijayawada, Andhra Pradesh . It is located at the upstream of <u>Prakasam Barrage</u> and is considered one of the largest river islands in India, with an area of 133 acres.
08	Sriharikota Island	It is a barrier island off the Bay of Bengal coast located in Andhra Pradesh . It separates Pulicat Lake from the Bay of Bengal . It houses the Satish Dhawan Space Centre , one of the two satellite launch centres of ISRO in India.
09	Srirangam Island	It is a river island in city of Tiruchirappalli (Tamil Nadu) . The island is formed by the Kaveri and Kollidam Rivers. The town of Srirangam is a prominent Hindu Vaishnav Pilgrimage centre, located at the centre of island.
10	Kunchikal Falls	Highest waterfall in India (455 metres), located in Shimoga district of Karnataka . It is formed by Varahi River . After the construction of Mani Dam near Masthikatte and an underground power generation station near Hulikal, Shimoga (Shivamogga) district, the water flow to the falls is greatly reduced and is visible only during the rainy season.
11	Jog Falls	It is a waterfall on Sharavati river, located in the Western Ghats of Shivamogga District, Karnataka . It is the 2 nd highest plunge waterfall in India. It is a segmented waterfall which depends on rain and season.
12	Dudhsagar Falls	It is a four-tiered waterfall located on Mandovi River in Goa . The falls is located in the Bhagwan Mahaveer Sanctuary and Mollem National Park among the Western Ghats. The falls is a punctuation mark in the journey of the Mandovi River from the Western Ghats to Panjim where it meets the Arabian sea.
13	Sadhu bet Island	It is situated on the Narmada River, Gujrat . The Statue of Unity which is built in honour of Sardar Vallabhbhai Patel is on this Island .

SOCIAL ISSUES

NIRF 2022

- **IIT-Madras** topped the rankings in overall category and continued to be featured as the country's best engineering institution, a position it has consecutively bagged since the rankings were introduced in 2016.
 - ✓ IIT-Madras was recognised as an Institution of Eminence (IoE) in 2019 by the Government of India.
- **Miranda House** too retained its pole position in the college category, which it has maintained since the category's introduction in 2017.
- **IISc, Bengaluru**, topped in the university and research categories.
- From next year, NIRF ranking categories will integrate -
 - ✓ **Institutional accreditation** which at present is done by National Assessment and Accreditation Council (NAAC) and **Programme accreditation** presently done by National Board of Accreditation (NBA).
 - ✓ **Ranking on innovation and entrepreneurship**, done earlier by the All-India Council for Technical Education (AICTE), will henceforth be integrated with the NIRF

National Institute Ranking Framework (NIRF)

- The NIRF was launched by the Ministry of Human Resource Development (MHRD now **Ministry of Education**) in **2015** (First edition came in 2016).
 - ✓ Prior to the advent of NIRF, higher education institutions (HEIs) were often ranked by private entities, particularly news magazines.
- While participation in the NIRF was initially voluntary, it became mandatory in 2018 for all government-run educational institutions.

Ranking Parameters And Categories

Ranking is based on **5 parameters** (see fig) across **11 Categories** - overall national ranking, universities, engineering, college, medical, management, pharmacy, law, architecture, dental and research.

Why India Needed Its Own Ranking Framework?

- **Subjective Global Rankings:** The government-run HEIs were dissatisfied with their rankings in the QS World University Rankings and the Times Higher Education World University Rankings.
 - ✓ The Indian government blamed subjective ranking methods (relying on the opinions of a small group of people) for the country's dismal performance.
- **Chinese Example:** When China faced the same dilemma around, they responded by creating their own university ranking system, called the Shanghai Rankings.
- **To Make It International In Character:** Though the Shanghai Rankings were designed to be worldwide from the start, the NIRF solely ranks Indian HEIs. However, the long-term plan is to give it an international character (especially for developing countries).

Significance

- The NIRF process gives detailed feedback regarding HEI's strengths and weaknesses.



- This provides other benefits, such as attracting industry for better placement and serving as a credible resource for parents and students to learn about the school.
- The NIRF indirectly assists top-performing institutions in building their brand and gaining widespread recognition without incurring additional marketing and branding costs.

Entire Population In A Region Of Himachal May Get ST Tag

- Central government is planning to grant ‘tribal’ status to **Trans-Giri region in Sirmaur district**.
- While the demand earlier was about giving ST status to **Hatti community**, the Centre now is seriously considering the option of extending it to entire Trans-Giri region.
- The proposal, if it cleared, will bestow Scheduled Tribe status on all the communities living in this designated area.



About Hatti Community

The Hattis is a close-knit community who got their name from their tradition of selling home grown vegetables, crops, meat and wool etc. at small markets called 'haat' in towns.

The Hatti community, whose men generally don a distinctive white headgear during ceremonies, is cut off from Sirmaur by two rivers called **Giri** and **Tons**.

o**Tons divides it from the JaunsarBawar region of Uttarakhand.**

The Hattis who live in the trans-Giri area and JaunsarBawar in Uttarakhand were once part of the royal estate of Sirmaur until JaunsarBawar's separation in 1815.

The two clans have similar traditions, and inter-marriages are commonplace.

There is a fairly rigid caste system among the Hattis — **Bhat** and **Khash** are the upper castes, while **Badhoisare** below them. Inter-caste marriages have traditionally remained a strict no.

Due to topographical disadvantages, the Hattis living in the Kamrau, Sangrah, and Shilliai areas lag behind in education and employment.

Demand For 'Tribal' Status

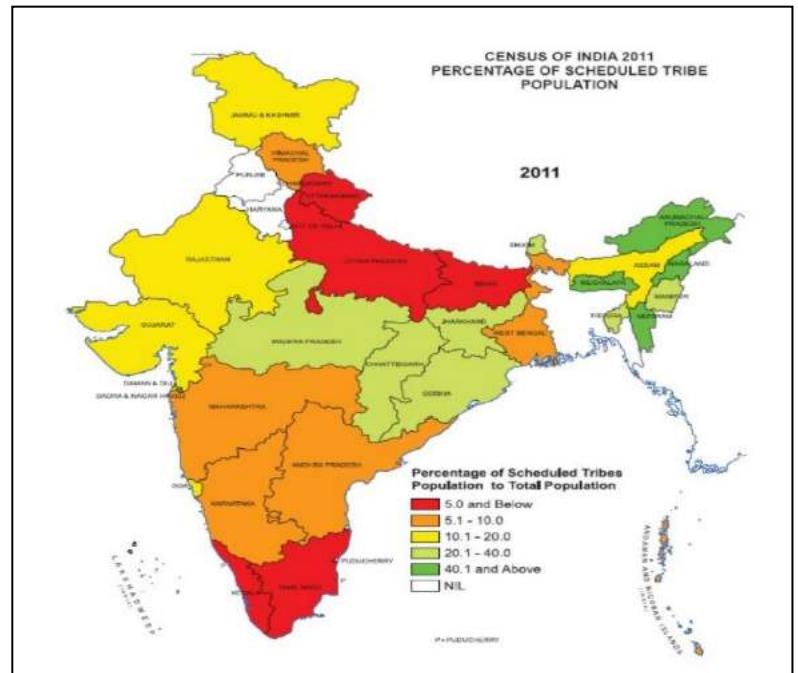
- The community has been making the demand since 1967, when tribal status was accorded to people living in the Jaunsar Bawar area.
- In 1967, their family members who were in Jaunsar were declared tribals but those who remained in Himachal were not given the same status or benefits.
- In March 2022, the state government sent a detailed ethnographic proposal to the Union Home Ministry, seeking inclusion of Hatti community of the trans-Giri area in the ST list of Himachal Pradesh.

Scheduled Tribes in India

- According to the 2011 Census, the Scheduled Tribes account for 104 million representing 8.6% of the country's population.
- Government of India set up Ministry of Tribal Affairs in 1999 after the bifurcation of Ministry of Social Justice and Empowerment.
- As in the case of the Scheduled Castes, the Plan objective of empowering the tribals is being achieved through a three-pronged strategy of: Social empowerment, Economic empowerment & Social justice

Article 342 of The Constitution

- Under **Article 342(1)**, the President may with respect to any State/Union territory, and where it is a State, after consultation with the Governor thereof, specify the tribes or tribal communities or parts of or groups within tribes or tribal communities.
 - ✓ The list of Scheduled Tribes is State/UT specific and a community declared as a Scheduled Tribe in a State need not be so in another State.
- Under **Article 342(2)**, Parliament may by law include in or exclude from the list of Scheduled Tribes specified in a notification issued under clause (1) any tribe or tribal community or part of or group within any tribe or tribal community.



Special Programmes & Enactments

- The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006*: This act recognized the rights of the communities that dwell in the forests (including Scheduled Tribes), over land and other resources.
- The provisions of *Panchayats (Extension to the Scheduled Areas) Act, 1996*, *Minor Forest Produce Act, 2005* and *the Tribal Sub-Plan strategy* are focused on the socio-economic empowerment of Scheduled Tribes.

Intellectual Heritage Project

The Union Education Ministry is planning to create an “Intellectual Heritage in Development” — a dialogue, documentation and research programme on the Government’s initiatives.

Intellectual Heritage in Development

- The project aims to create an ‘Intellectual Heritage’ in Development, Knowledge Resource and making New India, based on the government’s initiatives.
- Under this project, few of the themes based on the initiatives of *various Ministries/ Departments of the Government have been identified.*
- The plan is to hold about 100 conferences across the country on 100 themes during the three months.
- On these themes, dialogues, documentation, research and publication will be planned and organized in various academic institutions.
- In these conferences, research papers based on secondary data and sources available in ministries or elsewhere will be presented.
- Researchers belonging to reputed Higher Education Institutions will contribute to these papers, which will eventually be published in a book.

Some Of The Focus Areas Identified By Ministry

Economic Reforms and Emerging Global Economy	The Finance Ministry and related ministries to focus on: India becoming the fastest growing economy, expanding markets beyond borders, record-breaking export year, GST, making India an investment-friendly destination,
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	transparency in procurement, Atmarnirbhar Bharat, etc
India's great cultural heritage: Bhavyata and Divyata	<p>The Culture Ministry to focus on</p> <ul style="list-style-type: none"> ▪ bringing our culture history back home, ▪ tribute to India's great freedom fighters, ▪ Statue of Unity, Kranti Mandir (Red Fort), ▪ Jallianwala Bagh Samarak and ▪ 150th birth anniversary of Mahatma Gandhi. <p>The project also refers to restoring historical sites, including Ram Janmabhoomi temple and Somnath temple, among others.</p>
Tech-Powered India: Transforming Work, Empowering People	<p>IT Ministry to conduct research on:</p> <ul style="list-style-type: none"> ▪ Harnessing IT for Good Governance' and 'Jeevan Parmaan Patra', ▪ 'Ayushman Bharat Digital Mission', ▪ Atma Nirbhar India through Unified Payment Interface' (UPI), ▪ UMANG (Unified Mobile App for New age Governance).
Education Ministry	<p>The Education Ministry's initiatives to be highlighted include:</p> <ul style="list-style-type: none"> ▪ National Education Policy and Samagra Shiksha (National Education Mission), ▪ NIPUN Bharat/ National Achievement Survey (NAS), ▪ Higher Education Financing Agency, ▪ National Initiative for School Heads and Teachers Holistic Advancement (NISHTHA), ▪ Scheme for Higher Education Youth in Apprenticeship and Skills (SHREYAS), ▪ Rashtriya Uchcharat Shiksha Abhiyaan (RUSA) and PM-eVidya.
Sports Ministry, Social Justice Ministry and Tribal Affairs Ministry	<ul style="list-style-type: none"> ▪ The Social Justice Ministry is to focus on "Empowering Divyangs UDID (Unique ID for Persons with Disability). ▪ The focus in sports will be on Sports Ministry programmes such as Fit India and SPOT Scholarships. ▪ The Tribal Affairs Ministry is to highlight "Restoring Janjatiya Gourav through Heroes, Histories", "Eklavya Model Residential School" and scholarships.

World Press Freedom Index

The Centre said it doesn't subscribe to views of foreign NGO 'Reporters Without Borders', whose World Press Freedom Index ranked India at the bottom. It has ranked India in the bottom 30 worst nations in a list of 180.

World Press Freedom Index

- The Press Freedom Index is an annual ranking of countries compiled and published by Reporters Without Borders since 2002.
- Reporters Without Borders is an international non-profit and non-governmental organization with the stated aim of safeguarding the right to freedom of information.
- It is based in Paris, France.
- The Index highlights the degree of freedom that journalists, news organisations and netizens have in each country, and the government's efforts to respect such freedom.

Parameters

- The Index's rankings are based on a score ranging from 0 to 100 that is assigned to each country or territory. 100 being the best possible score and 0 the worst.
- This score is calculated on the basis of two components:
 - ◇ **Quantitative tally** of abuses against journalists in connection with their work, and against media outlets.
 - ◇ **Qualitative analysis** of the situation in each country or territory based on the responses of press freedom specialists to Reporters Without Borders (RSF) questionnaire.
- Each country or territory's score is evaluated using five contextual indicators.

Political
Context

Legal
Framework

Economic
Context

Socio-cultural
Context

Safety

World Press Freedom Index 2022

- **Norway (1st), Denmark (2nd), and Sweden (3rd)** grabbed the top positions.
- On the other hand, North Korea remained at the bottom in the list of 180 countries and territories ranked by the Index.
- The situation is classified as “very bad” in a record number of 28 countries in this year’s Index.

India’s Scenario

- India’s position has been consistently falling in the index since 2016 when it was ranked 133.
- With a global score of 41, India has gone down to the 150th position from 142 last year.



Government’s Stand

- **Various reasons cited by the govt:** Reasons include very low sample size, little or no weightage to fundamentals of democracy, adoption of a methodology which is questionable and non-transparent, etc.
- The govt further clarified that it does not maintain specific data with respect to arrests of journalists, since it falls under the purview of the state govt.
 - ✓ Police and public order are state subjects.
 - ✓ State governments are responsible for prevention, investigation of crimes and for prosecuting criminals.
 - ✓ The National Crime Records Bureau does not maintain specific data with respect to arrest of journalists.

New Guidelines For 'Mission Vatsalya'

The Ministry of Women and Child Development (MWCD) recently issued new guidelines for the 'Mission Vatsalya' Scheme in order to lay out a future roadmap for child protection.

Background

- Integrated Child Protection Scheme (ICPS) was implemented by the Ministry since 2009-2010.
- The scheme was then renamed as “Child Protection Services (CPS)” Scheme in 2017.
- The CPS Scheme has been now subsumed under Mission Vatsalya from 2021-22 onwards.

MISSION VATSALYA The scheme aims to :

- Support and Sustain Children in difficult circumstances
- Develop context-based solutions for holistic development of children from varied backgrounds
- Provide scope for green field projects for encouraging innovative solutions.
- Cement convergent action by gap funding as per the need.



About Mission Vatsalya Scheme

- ◆ It is an umbrella scheme of the MWCD, which aims to **provide a roadmap to achieve development and child protection priorities** aligned with the SDGs.
 - It lays emphasis on **child rights, advocacy and awareness** along with **strengthening of the juvenile justice care and protection system** with the motto to 'leave no child behind'.
- ◆ It is implemented as a centrally sponsored scheme.
- ◆ **Basic framework for implementation:** The provisions of the **Juvenile Justice (Care and Protection of Children) Act, 2015** and the **Protection of Children from Sexual Offences Act, 2012** form the basic framework for implementation of the Mission.
- ◆ **Components:** The Scheme includes statutory bodies, service delivery structures, institutional care or services, non-institutional community-based care, emergency outreach services, training and capacity building.
- ◆ **Vision of the Scheme:**
 - To ensure opportunities to enable them to discover their full potential and assist them in flourishing in all respects, in a sustained manner.
 - To promote family-based non-institutional care for children in difficult situations, based on the principle of institutionalization as a last resort measure.

Key Highlights Of The New Guidelines

- The guidelines elaborate on the vision for "**Vatsalya Sadan**," with a specific focus on "Juveniles in Conflict with the Law."
 - ✓ Vatsalya Sadan is an Integrated Home Complex of Child Care Institutions (Children Home, Observation Home, Special Home, Place of Safety).
 - ✓ Juvenile Justice Board and Child Welfare Committee are also located within the same premises.
- The new guidelines include promoting **family-based non-institutional care** for children in difficult situations, as well as the establishment of "**Cradle Baby Reception Centres**" for receiving abandoned babies vulnerable to trafficking.
 - ✓ Cradle Baby Reception Centres shall be fully equipped to care for infants in at least one specialised adoption agency (SAA) per district.
 - ✓ Their objective shall be to rescue the abandoned children and look after them till they are adopted.
- It makes no mention of the existing helpline number (1098-Childline) or its future. It, however, states that "Mission Vatsalya," in collaboration with states and districts, will implement a 24x7 helpline service for children.
 - ✓ This helpline service will be integrated with the Ministry of Home Affairs' Emergency Response Support System 112 (ERSS-112) helpline.
- **States will have to retain the official name**, as given by the Centre to get benefits under this scheme.
- **Funds to states** will be approved through **Mission Vatsalya Project Approval Board (PAB)**, which will be chaired by the WCD Secretary.
- At state level, there will be a **committee headed by the Chief Secretary** to monitor, review and promote convergence in the implementation of the scheme.
- States/UTs have also been directed to focus (through educators, therapists) on **special needs children in child care institutions (CCI)**, as they are unable to attend school due to physical or mental disabilities.
- The new guidelines **define the role of District Magistrate**, who will be responsible for ensuring execution of the mission at the district level.

UNs' World Population Prospects (WPP)

The 2022 edition of the United Nations' World Population Prospects (WPP) has been released on the World Population Day (11 July). Report says that India is projected to surpass China as the world's most populous country in 2023.

World Population Prospects (WPP)



- The Index's rankings are based on a score ranging from 0 to 100 that is assigned to each country or territory 100 being the best possible score and 0 the worst.
- Each revision of WPP provides a historical time series of population indicators starting in 1950.
- It does so by taking into account newly released national data to revise estimates of past trends in fertility, mortality or international migration.

Key Highlights of 2022 Report

- **The world's population continues to grow, but the pace of growth is slowing down**
 - ✓ The global population is expected to grow to around 8.5 billion in 2030, 9.7 billion in 2050 and 10.4 billion in 2100.
 - ✓ In 2020, the global growth rate fell under 1% per year for the first time since 1950.
- **Rates of population growth vary significantly across countries and regions**
 - ✓ More than half of the projected increase in global population up to 2050 will be concentrated in just eight countries including India and Pakistan.
 - ✓ The 46 least developed countries (LDCs) are among the world's fastest-growing.
- **The population of older persons is increasing both in numbers and as a share of the total:** It is projected to rise from 10% in 2022 to 16% in 2050.
- A sustained drop in fertility has led to an increased concentration of the population at working ages (between 25 and 64 years)
- **International Migration Impacts:**
 - ✓ Over the next few decades, migration will be the sole driver of population growth in high-income countries.
 - ✓ For 10 countries, the estimated net outflow of migrants exceeded 1 million over the period from 2010 through 2021.
 - ✓ In many of these countries, the outflows were due to temporary labour movements, such as for Pakistan (net flow of -16.5 million), India (-3.5 million), Bangladesh (-2.9 million), Nepal (-1.6 million) and Sri Lanka (-1.0 million).
 - ✓ In other countries, insecurity and conflict drove the outflow of migrants over this period.
- **Policies aimed at reducing fertility would have little immediate impact**
 - ✓ Two-thirds of the projected increase in global population through 2050 will be driven by the momentum of past growth.
- **Rapid population growth is both a cause and a consequence of slow progress in development**
 - ✓ The necessity of educating growing numbers of children, draws resources away from the quality of education.
 - ✓ At the same time, achieving the SDGs, particularly those related to health, education and gender, is likely to hasten the transition towards lower fertility in countries with continuing high levels.
- **More and more countries have begun to experience population decline**

	1990	2022	2050
1	China (1,144)	China (1,426)	India (1,668)
2	India (861)	India (1,412)	China (1,317)
3	US (246)	US (337)	US (375)
4	Indonesia (181)	Indonesia (275)	Nigeria (375)
5	Brazil (149)	Pakistan (234)	Pakistan (366)
6	Russia (148)	Nigeria (216)	Indonesia (317)
7	Japan (123)	Brazil (215)	Brazil (231)
8	Pakistan (114)	Bangladesh (170)	Congo (215)
9	Bangladesh (106)	Russia (145)	Ethiopia (213)
10	Nigeria (94)	Mexico (127)	Bangladesh (204)
11	Mexico (81)	Japan (124)	
12		Ethiopia (122)	
13			Mexico (144)
14			Russia (133)
15			
16			Congo (97)

Two-thirds of the global population lives in a country or area where lifetime fertility is below 2.1 births per woman

- **COVID-19 pandemic has affected all three components of population change** (births, deaths, and migration)
 - ✓ Global life expectancy at birth fell to 71.0 years in 2021, down from 72.8 in 2019
 - ✓ Available evidence about the effect of COVID-19 on fertility levels remains mixed.
 - In low- and middle-income countries, the availability of and the demand for contraception, as well as reported numbers of unintended pregnancies and births, have remained relatively stable.
 - In high-income countries, short-term fluctuations in numbers of pregnancies and births.
 - ✓ Pandemic restricted all forms of human mobility, including international migration.

Analysis

- **Overcrowding is not a concern**
 - ✓ Earlier, there was a concern regarding overcrowding as global population was rapidly increasing. However, global population is already 8 billion and several countries (including India) have achieved a replacement rate of fertility.
 - ✓ The real concern is about the quality of life for such a huge population.
- **Increased need for skilling in India**
 - ✓ Experts feel cohorts of 0-14 years and 15-24 years will continue to decline.
 - ✓ Those of 25-64 and 65+ will continue to rise for the coming decades.
 - ✓ For those already in the 25-64 age bracket, skilling is the only way to ensure productivity
- **Challenges associated with increasing numbers of old people**

The 65+ category is going to grow quite fast and it faces several challenges. Provisioning of social security is obviously a big challenge. This will stretch the resources of governments.

India's Demography At Crossroads

As per the "Youth in India 2022" report, India's favourable demographic dividend is at an inflection point, with the population share of the youth starting to taper off. Demographic dividend occurs when the proportion of working people in the total population is high. This report has been released by the Ministry of Statistics and Programme Implementation.

Entity/Instrument/ Organization	Age (years)
UN Secretariat/UNESCO/ILO	Youth: 15-24
UN Habitat (Youth Fund)	Youth: 15-32
UNICEF/WHO/UNFPA	Adolescent: 10-19 Young people: 10-24 Youth: 15-24
UNICEF/ The Convention on Rights of the Child	Child under 18
The African Youth Charter	Youth: 15-35

Who Are Youths?

- There is no universally agreed international definition of the youth age group.
- United Nations defines 'youth' as those persons between the ages of 15 and 24 years.
- In India, as per National Youth Policy-2003, 'youth' was defined as a person of age between 13-



35 years.

- But in National Youth Policy 2014, persons between the age group of 15 and 29 years are considered youth.

Key Highlights Of The Report

- The youth in the age group of 15-29 years comprise 27.2% of the population for 2021, which is expected to decrease to 22.7 by 2036.
 - ✓ The total youth population from 333.4 million in 2011 is projected to reach 371.4 million by 2021.
 - ✓ Thereafter, the number will decrease to 345.5 million by 2036.
- **Share of the elderly is expected to increase** during 2021-2036.
 - ✓ The proportion has increased to 9.2% in 2016 and is projected to reach 14.9% in 2036.
 - ✓ States such as Kerala, Tamil Nadu and Himachal Pradesh are projected to see a higher elderly population than the youth by 2036.
- **Projections for states:** Bihar and Uttar Pradesh experienced a rise in proportion of youth population to total population till 2021 and then it is expected to start declining.
 - ✓ These two states, along with Maharashtra, Madhya Pradesh and Rajasthan, are projected to have 52% of the country's youth.

State/Union Territory	% of youth in total population of State/UT		
	2021	2031	2036
Bihar	28.8	27.7	25.5
Himachal Pradesh	25.1	21.4	19.5
Kerala	22.1	20	19.2
Madhya Pradesh	27.7	25.3	24.7
Maharashtra	26.1	22.5	21
Rajasthan	28.7	25.8	24.6
Tamil Nadu	23.2	20.4	19.1
Uttar Pradesh	29.9	26.3	25.1
India	27.2	24.1	22.7

Source: Youth in India 2022 Report, MoSPI
Report of the Technical Group on Population Projections for India and States 2011-2036, Ministry of Health & Family Welfare, 2020

State of Food Security and Nutrition In The World, 2022

The State of Food Security and Nutrition in the World, 2022 report has been released.

- It is an annual flagship report to inform on progress towards ending hunger, achieving food security and improving nutrition. It is jointly prepared by:

Food and Agriculture Organisation (FAO)

International Fund for Agricultural Development (IFAD)

UNICEF

World Food Programme (WFP)

WHO

Key Highlights

- **World is moving backwards its efforts to end hunger, food insecurity & malnutrition**
 - ✓ We are now only eight years away from 2030, but the distance to reach many of the SDG 2 (Zero Hunger) targets is growing wider each year.
 - ✓ At the same time, more frequent and extreme climate events are also disrupting supply chains, especially in low-income countries.
- **Global hunger has increased**
 - ✓ Number of people affected by hunger globally rose to as many as 828 million in 2021.
 - ✓ This number saw an increase of about 46 million since 2020 and 150 million since the outbreak of Covid-19.
 - ✓ It further said that, in 2021, around 2.3 billion people are facing moderate or severe difficulty in obtaining enough to eat.
 - This was before the Ukraine war, which has disrupted supply chains & sparked increases in the cost of grain, fertilizer, and energy.
- **Gender gap in food insecurity continued to rise in 2021**
 - ✓ 31.9% of women in the world were moderately or severely food insecure, compared to 27.6% of men.

India Specific Observation

- **Number of undernourished people declined** to 224.3 million (16.3%) in 2019–21 from 247.8 million (21.6%) in 2004-06.
- **Number of stunted children under 5 years declined** to 36.1 million in 2020 from 52.3 million in 2012.
 - ✓ The number of children under five years of age who are overweight declined to 2.2 million in 2020 from 3 million in 2012.
- **Number of obese adults in India grew** to 34.3 million in 2016 from 25.2 million in 2012.
- **Prevalence of anaemic women** aged 15 to 49 years declined marginally from 53.2% in 2012 to 53% in 2019.
- **People who were unable to afford a healthy diet** touched 973.3 million in 2020 (70.5%), up from 948.6 million in 2019 (69.4%).
- **India provides substantial food subsidies to final consumers** under TPDS for grains.
- **Lauded India for its effort**
 - ✓ The report said that the most prominent example of a (Lower-middle-income countries) LMIC is India, where the food and agricultural policy has historically focused on protecting consumers.
 - ✓ India does this by ensuring affordable food prices, through
 - export restrictions (on wheat, non-basmati rice, and milk, among others);
 - marketing regulations around pricing; and
 - public procurement, public food stockholding & distribution of vast range of agricultural commodities.
 - ✓ Input subsidies and expenditure on general services such as in R&D and infrastructure.
 - This is used as means of compensating for price disincentives generated by trade and market measures.
 - It also helps in boosting production and self-sufficiency in the country.

State Ranking Index for implementation of NFSA 2013

- Recently, the Ministry of Consumer Affairs, Food and Public Distribution, Government of India, released the **first** State Ranking Index for implementation of the National Food Security Act, 2013.
- Among the 20 big states and Union Territories (UTs), Odisha topped the list while Goa came last.

National Food Security Act (NFSA)

Legal right

- It provides a legal right to persons belonging to "eligible households" to receive food grains at subsidised price - rice at Rs 3/kg, wheat at Rs 2/kg and coarse grain at Re 1/kg, under the under Targeted Public Distribution System (TPDS).

- These are called central issue prices (CIPs).

- The Act covers up to 75% of the rural population and up to 50% of the urban population for receiving subsidised food grains (overall 67% of the total population).

Special focus on the nutritional support to women and children.

- **Women:** It provides meals to pregnant women and lactating mothers during pregnancy and six months after the child birth.
- **Children:** Up to 14 years of age will be entitled to nutritious meals.

Food security allowance: In case of non-supply of entitled food grains or meals.

- **Setting up Grievance redressal mechanism** at the District and State levels.

1st Edition State Ranking Index for Implementation of The NFSA

- It was launched by the Ministry of Consumer Affairs, Food & Public Distribution.

- It highlights the reforms undertaken by States and UTs and creates a cross-learning environment and scale-up reform measures by all states and UTs.

Key Features

- It largely focused on NFSA distribution and will include procurement, Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) distribution in future.
- It is built on 3 key pillars which covers the end-to-end implementation of NFSA through TPDS.
 - ✓ **Coverage of NFSA**, rightful targeting, and implementation of all provisions under NFSA.
 - ✓ **Delivery platform** while considering the allocation of food grains, their movement, and last-mile delivery to Fair Price Shops (FPS).
 - ✓ **Nutrition initiatives** of the department.

Benefits

- The index has been developed to create an environment of competition, cooperation and learning among states while addressing matters of food security and hunger.
- Increase transparency in system by publishing reliable and standard data in the public domain.
- It can also be utilised by the global and Indian agencies for research and analysis.

Ranking

- Overall, Odisha, Uttar Pradesh and Andhra Pradesh Secured the top three positions in the Index.
- Among the special category states (northeastern, Himalayan and Island states), Tripura, Himachal Pradesh and Sikkim obtained the top positions.
- Jharkhand, Uttar Pradesh, Dadra and Nagar Haveli and Daman and Diu scored the highest in terms of coverage, targeting and implementing provisions of NFSA.
- Bihar, Andhra Pradesh and Telangana had the best delivery platform displaying the efficiency of the TPDS supply chain.

IMPLEMENTING FOOD SECURITY		
How the 20 'general category' states ranked in terms of NFSA implementation		
TOP THREE		
Rank	State	Index score
1	Odisha	0.836
2	Uttar Pradesh	0.797
3	Andhra Pradesh	0.794
BOTTOM THREE		
18	Delhi	0.658
19	Chhattisgarh	0.654
20	Goa	0.631

How Did Odisha Come In First Place?

- Robust end-to-end computerization of TPDS operations. A digitised beneficiaries database has been hosted in the public domain and updated in Ration Card Management System (RCMS) Centres.
- All the food storage depots of Food Supplies & Consumer Welfare Department have been fully automated.
- Real-time electronic recording of doorstep delivery at FPSs across the State.
- All the Fair Price Shops are equipped with electronic Point of Sale (e-POS) devices which ensure distribution through automated mode.
- One Nation One Ration Card (ONORC) Programme has been implemented across the state from 2021. PDS beneficiaries are now availing of intra-state/inter-state portability of ration cards.
- Odisha has implemented the pilot scheme of 'Supply of Fortified Rice under Public Distribution in Malkangiri district' from 2021.

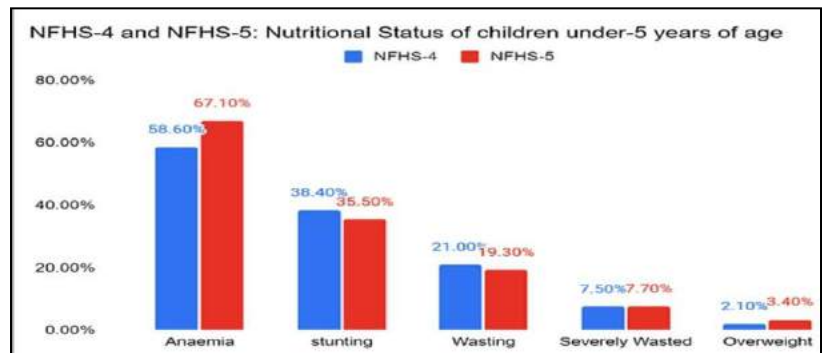
Panel Calls For Boosting Protein, Nutrients In Government Meal Programmes

An inter-ministerial committee has observed that the Covid-19 pandemic is likely to have aggravated the silent crisis of undernutrition in India. It was submitted in October 2021 and is currently under the Centre's consideration.

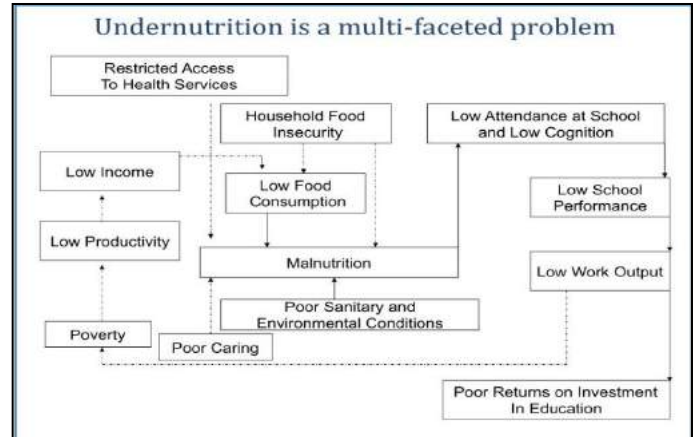
Nutritional Status in India

According to the National Family Health Survey (NFHS-5) 2019-21, India has seen no significant improvement in nutritional status among its population. {Refer the Picture given beside}

Various Factors Behind The Present Nutritional Situation In India



- **Poverty Trap:** Poor people do not have enough money to buy/produce enough food and get trapped into poverty-hunger nexus.
- **Dietary Ignorance:** Many people do not complement their children's diet with sufficient nutritional components.
- **Socio-Cultural Factors:** Hunger in India also has age, gender and caste dimensions. Compared to men, women more often forgo meals to feed their children.
- **Caste and tribe are structural factors:** These factors predispose certain groups to long term poverty and deprivation which ultimately gets translated into hunger and malnutrition.
- **Politics of Distribution:** According to Amartya Sen, hunger usually arises from food distribution problems/governmental policies in developing world, and not from insufficiency of food.



✓ Corruption, leakages, exclusion-inclusion error etc. makes the PDS inefficient in addressing the issue of hunger and malnutrition.

- **Food wastage** (Be it cold storage of Food Corporation of India or the extravaganza shown in marriages) distorts food availability making difficult for poor and vulnerable to buy food from market.
- **Natural Disaster:** Erratic monsoon, incidence of draughts, unseasonal rainfall, cyclones etc. and the recent COVID – 19 pandemics has affected the food grain production

Key Observations

- **Protein rich food items as well as micronutrients to be legally included in meals** given through food safety programmes in schools and anganwadis.
 - ✓ Protein-rich food items - eggs, nuts and legumes;
 - ✓ Micronutrients - calcium, iron, zinc, folate and vitamin A.
- This could be done by revising Schedule II of the National Food Security Act (NFSA), 2013.
 - ✓ **Schedule II** of the NFAS lays down nutritional standards for government food safety programmes like mid-day meal, PM Poshan and Integrated Child Development Services scheme.
 - ✓ Currently, it quantifies nutrition per meal in terms of calories and protein only.
 - ✓ However, inter-ministerial panel has called for micronutrients also to be taken into account.
- The report states that those who do not consume eggs may be provided double the proposed quantity of nuts and seeds.

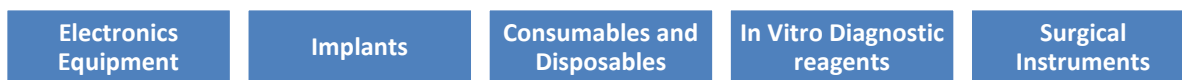
- **Recommended new standards of kilocalories and protein per meal** along with fixing proposed intake of micronutrients for all categories of beneficiaries.
 - ✓ It also recommended the food items required to achieve those standards. This excludes milk and fruits.
 - ✓ According to the cost implications of the recommendations, the cost per meal in lower primary classes will be Rs 9.6 and Rs 12.1 in upper primary.
 - ✓ Currently, the cooking costs are Rs 4.97 and Rs 7.45 respectively.

Drug, Medical Devices, and Cosmetics Bill-2022

The Union Health ministry has released the new draft 'Drug, Medical Devices, and Cosmetics Bill-2022'.

Medical Device Sector in India

- The current market size of the medical devices sector in India is estimated to be \$11 bn and its share in the global medical device market is estimated to be 1.5%.
- The medical device is a multi-product sector, with the following broad classifications:



- Both drugs and medical devices are now regulated by Central Drugs Standard Control Organisation (CDSCO).
 - ✓ CDSCO is the **Central Drug Authority** for discharging functions assigned to the Central Government under the Drugs and Cosmetics Act, 1940.

Recently, Department of Pharmaceutical (DoP) published the draft Uniform Code for Medical Device Marketing Practices (UCMDMP) to regulate fair **marketing practices** by the medical device industry

Key Provisions of Drug, Medical Devices, and Cosmetics Bill-2022

- It seeks to replace the **Drugs and Cosmetics (D&C) Act, 1940.**
- **Defining Medical Devices:**
 - ✓ Currently, medical devices are treated as drugs and there is no separate definition
 - ✓ The draft Bill has separate definition for medical devices that bring under its ambit diagnostic equipment, its software, implants, devices for assistance with disabilities, life support, instruments used for disinfection.
- **Medical Technical Advisory Board (MTAB):**
 - ✓ The Bill proposes MTAB on the lines of existing Drugs Technical Advisory Board.
 - ✓ This board will not only include medical professionals, but also people with technical knowledge of the devices.
 - ✓ The board will include officials from various departments such as atomic energy, department of science and technology, ministry of Electronics, DRDO, etc.
 - ✓ The draft Bill also proposes medical device testing centres on the lines of drug laboratories in states and at the central level.
- **Mandatory Permission For Clinical Trials:**
 - ✓ The new Bill also proposes compulsory permission of the central licensing authority for clinical trials or clinical investigation of drugs and medical devices.
 - ✓ Although companies at present also have to seek permission from the apex drug regulator to conduct trials, medical devices was never mentioned in the previous law.

- ✓ Also, medical management and compensation to persons who are injured while participating in such trials.
- **E-Pharmacies:**
 - ✓ Central government must come up with rules to regulate online sale of drugs and for online pharmacies to operate in accordance with a licence or permission issued.

Rise In Unvaccinated Children In India

- Number of children in India who were unvaccinated or missed their first dose of diphtheria-tetanus-pertussis (DTP) combined vaccine doubled. The number has increased from 1.4 million in 2019 to 2.7 million in 2021.
- This was revealed by the official data published by the WHO and UNICEF.
- UNICEF and WHO sound the alarm as new data shows global vaccination coverage continued to decline in 2021, with 25 million infants missing out on lifesaving vaccines.

Key Highlights

- **Largest sustained decline in childhood vaccinations** in approximately 30 years
 - ✓ The % of children who received three doses of the vaccine against DTP fell 5 percentage points between 2019 and 2021 to 81%. DTP acts a marker for immunization coverage within and across countries.
 - ✓ As a result, 25 million children missed out on one or more doses of DTP through routine immunization services in 2021 alone.
- **Factors responsible for this decline**
 - ✓ an increased number of children living in conflict and fragile settings;
 - ✓ increased misinformation;
 - ✓ COVID-19 related issues such as service and supply chain disruptions, resource diversion.

India Specific Observation

India was able to arrest the declining trend between 2020 and 2021

- Though immunisation coverage continues to decline the world over, India was able to arrest the trend between 2020 and 2021.
- The number of children with zero dose rose sharply to three million in 2020.
- But a further backsliding was prevented and the number dropped to 2.7 million in 2021. This was due to catchup programmes such as 3rd Intensified Mission Indradhanush (IMI).

Global Gender Gap Index for 2022

The Global Gender Gap Index for 2022 has been released by the World Economic Forum (WEF). The index ranks India at 135 out of 146 countries. In 2021, India was ranked 140 out of 156 countries.

Global Gender Gap Report

- It is published annually by WEF. The first report was published in 2006.
- The report also includes Global Gender Gap Index. The index benchmarks the current state and evolution of gender parity across four key dimensions.

Economic Participation
and Opportunity

Educational
Attainment

Health and Survival

Political
Empowerment

- It also tracks progress towards closing these gaps over time.

Key Highlights

- **Time to reach gender parity:** It will take another 132 years (compared to 136 years in 2021) to close the gender gap. This is due to continued disruption caused by Covid pandemic. South Asia will take the longest to reach gender parity, which is likely to be in 197 years.
- **Top performers:** Iceland (90.8%) is leading the global ranking. It was the only economy to have closed more than 90% of its gender gap. Iceland is followed by Finland, Norway, New Zealand and Sweden.
- **Performance of India's neighbours:** India also ranks poorly among its neighbours and is behind Bangladesh (71), Nepal (96), Sri Lanka (110), Maldives (117) and Bhutan (126).
 - ✓ Iran (143), Pakistan (145) and Afghanistan (146) perform worse than India in south Asia.

India's Performance

- India has approximately 66.2 crore women. In 2022, India's overall score has improved from 0.625 (in 2021) to 0.629.
- India's (135th) global gender gap score has oscillated between 0.593 and 0.683 since the index was first compiled.
- In 2022, India scored 0.629, which is its seventh-highest score in the last 16 years.

Index/sub-index	2022 (146 countries)		2021 (156 countries)	
	Rank	Score	Rank	Score
Global Gender Gap Index	135	0.629	140	0.625
Political empowerment	48	0.267	51	0.276
Economic participation & opportunity	143	0.350	151	0.326
Educational attainment	107	0.961	114	0.962
Health and survival	146	0.937	155	0.937

Source: World Economic Forum

- **Political Empowerment**
 - ✓ This includes metrics such as the percentage of women in Parliament, the percentage of women in ministerial positions etc.
 - ✓ Of all the sub-indices, this is where India ranks the highest (48th out of 146).
 - ✓ However, notwithstanding its rank, its score is quite low at 0.267.
 - ✓ Some of the best ranking countries in this category score much better.
 - E.g., Iceland is ranked 1 with a score of 0.874 and Bangladesh is ranked 9 with a score of 0.546.
- **Economic Participation and Opportunity:** This includes metrics such as the percentage of women who are part of the labour force, wage equality for similar work, earned income etc.
- **Educational Attainment:** This sub-index includes metrics such as literacy rate and the enrolment rates in primary, secondary and tertiary education.
- **Health and Survival:** This includes two metrics: the sex ratio at birth (in %) and healthy life expectancy (in years). In this metric, India is ranked the last (146) among all the countries. Its score hasn't changed from 2021 when it was ranked 155th out of 156 countries.

NAMASTE Scheme

- National Action Plan for Mechanized Sanitation Ecosystem (NAMASTE) is a **joint scheme** of Department of Drinking Water and Sanitation, Ministry of Social Justice and Empowerment and Ministry of Housing and Urban Affairs.
- It is **launched for** cleaning sewers and septic tanks.
- The main **aim of the scheme** is:
 - ✓ Zero deaths in India due to sanitation work.
 - ✓ All sanitation workers working at sewer & septic tanks should have facilities of alternative livelihoods.
 - ✓ No sanitation workers should come in direct contact with human faecal matter.

ECONOMY AND INFRASTRUCTURE

India's International Bullion Exchange (IIBX)

Gujarat International Finance Tech-City (GIFT City) has emerged as the country's **first Greenfield integrated city**.

Services Offered in GIFT City

GIFT IFSC (**International Financial Services Centre**) provides services related to capital markets, offshore insurance, offshore banking and asset management, aircraft and ship leasing, and ancillary services.

- It also does *merger and acquisition* activities among trans-national corporations, risk management operations such as insurance and reinsurance, Global tax management and cross-border tax liability optimization etc.
- It houses 2 **international stock exchanges** with average daily trading volume of over \$11 billion.
- An **international bullion exchange** was also launched on 29th July 2022.

About India's International Bullion Exchange (IIBX)

- **About bullion exchange:** It allows buyers and sellers to **trade gold & silver** as well as associated **derivatives**.
- **IIBX description:** IIBX will provide for **efficient price discovery** with assurance of *responsible sourcing and quality*. It has not only enrolled jewellers to trade on the exchange, but has also set up necessary **infrastructure** to store physical gold and silver.
- The IIBX shall be the Gateway for Bullion Imports into India
- **Regulator:** International Financial Services Centres Authority (IFSCA) is the regulator of IIBX.
- **Significance of IIBX:** It offers a **diversified portfolio** of products and technology services at a cost which is far **more competitive** than the Indian exchanges as well as other global exchanges in Hong Kong Singapore, Dubai, London and New York.
 - ✓ It will give impetus to **financialization of gold** across the country and will also empower India to gain its rightful place at the global bullion market.
 - ✓ With the launch of IIBX, India would be able to **affect international bullion prices** as a principal consumer.

Regulatory Framework For Angel Investors In India

- The *International Financial Services Centres Authority (IFSCA)* has issued a regulatory framework for **Angel funds** under the *IFSCA (Fund Management) Regulations, 2022*.
- The move intends to implement the IFSCA mandate to develop and regulate financial products, financial services, and financial institutions in the International Financial Services Centres (IFSC)
 - ✓ **Angel Funds** bridge the gap between start-ups and angel investors, who are instrumental in providing mentoring, and resources to the start-ups.

Features Of The Framework

- A *Fund Management Entity (FME)* in IFSC will be able to launch Angel Funds by filing a placement memorandum with the Authority under a Green Channel.
- This means the schemes can open for subscription by investors immediately upon filing the placement memorandum with the IFSCA.
- Angel Funds shall accept investments from accredited investors or investors who are willing to commit at least \$40,000 over a period of 5 years.

- Angel Funds are permitted to invest in start-ups as well as other regulated angel schemes in IFSC, India, and foreign jurisdictions upon receiving consent from the desirous investors.
- Although investments by an Angel Fund in a start-up is capped at \$1,500,000, the Angel fund will be permitted to invest in subsequent rounds of fundraising by the start-up in order to protect its shareholding from dilution.

India Tops in Remittance

The first WHO "World report on the health of refugees and migrants" was released.

Key Findings

- In 2021, India was the top remittance recipient (\$87 billion nearly 2.75% of GDP) among low- and middle-income countries.
 - ✓ It recorded a marginal decline of 0.2% in 2020 and a growth of 8% in 2021.
 - ✓ For India, remittances peaked at 4% of GDP in 2009.
- Remittances in India were way ahead of China and Mexico's 53 billion\$, the Philippines (36 billion\$) and Egypt (33 billion\$) - the other four countries in top five.
- The **United States** was the **largest source country** for remittances, followed by the United Arab Emirates, Saudi Arabia and Switzerland.
- In many low- and middle-income countries, migrants stepped up their support to families back home, especially to countries affected by the spread of the COVID-19 Delta variant.
- In most other areas, remittances have also recovered strongly, registering growth of 5-10% in Europe and Central Asia, the Middle East and northern Africa, southern Asia and sub-Saharan Africa.
- The key contributing factors are the willingness of migrants to support their families in times of need, together with the fiscal stimuli and employment support programmes implemented in the United States and European destination countries.
- In the Gulf Cooperation Council countries and the Russian Federation, the recovery of outward remittances was also facilitated by stronger oil prices and the resulting pickup in economic activity.

As per an **RBI article** remittances from the US (23% of total inward remittances in 2020-21) have surpassed that of UAE (17-18%)

State-wise share

- The share of the traditional remittance recipient states of Kerala, Tamil Nadu and Karnataka, has almost halved in 2020-21.
 - These states had strong dominance in the Gulf countries.
- These states accounted for only 25% of total remittances in 2020-21 compared to over 42% in 2016-17.
- Now, Maharashtra has emerged as the top recipient state surpassing Kerala.
 - Maharashtra now accounts for almost 35% of the total remittances in 2020-21.

Significance of Remittance

- It is a sum of money sent to another party, usually in another country.
- It is an important and positive economic result of migration for migrants themselves and for family and friends remaining in their home countries.
- It accounts for a large fraction of the global movement of funds. Despite predictions that remittances would fall due to COVID-19, remittances proved to be resilient.

- It now stands at more than threefold above official development assistance and are more than 50% higher than FDI, excluding in China.

Extra Mile

Total Outward Remittances

- Total outward remittances under the RBI's Liberalised Remittance Scheme (LRS) shot up to an all-time high of \$19.610 billion in the year ended March 2022 due to more spending on international travel and overseas education and gifts .
- It was \$12.684 billion in the year ended March 2021.

Investments In Overseas Equity And Debt By Indians Also Shot

- Investments in overseas equity and debt by Indians also shot up to \$746.5 million in FY22 as against \$471.80 million in the previous year.

Liberalised Remittance Scheme (LRS)

- Brought out by the RBI in **2004**, it allows resident individuals to remit a certain amount of money during a financial year to another country for investment and expenditure.
- According to the prevailing regulations, resident individuals may remit up to \$250,000 per financial year.

Allowed Transactions Under LRS

- Apart from the areas highlighted in the diagram, the remitted amount can also be invested in shares, debt instruments, and be used to buy immovable properties in overseas market.
- Individuals can also open, maintain and hold foreign currency accounts with banks outside India for carrying out transactions permitted under the scheme.



Restrictions Under LRS

- Buying and selling of foreign exchange abroad, or purchase of lottery tickets or sweep stakes, proscribed magazines and so on,
 - ✓ Any items that is restricted under Schedule II of Foreign Exchange Management (Current Account Transactions) Rules, 2000.
- Also, one cannot make remittances directly or indirectly to countries identified by the **Financial Action Task Force** as non-co-operative countries and territories.

Small Savings Schemes Rates Unchanged

- The Central government recently announced that the interest rates on small savings schemes will remain unchanged for the July-September quarter.
- The rates have now been kept unchanged for nine consecutive quarters. The interest rates on the various instruments range from 4-7.6%.

Small Savings Scheme

- Small saving schemes are **backed by the government** and inculcate the saving habit among individuals for retirement or emergencies.
- These schemes, which are **launched by the government, banks, and public sector financial institutions**, offer attractive rates of interest and tax exemptions on investment.
- Small Saving Schemes can be grouped under **three heads**:
 - **Post office Deposits**: Post Office Savings Account, Post Office Time Deposits (1,2,3 and 5 years), Post Office Recurring Deposits and Post Office Monthly Account.
 - **Savings Certificates**: National Savings Certificate (NSC) and KisanVikasPatra (KVP).
 - **Social Security Schemes**: Public Provident Fund, Senior Citizens Savings Scheme (SCSS) and Sukanya Samridhi Account.

Rates on Small Savings Schemes

- The interest rates for small saving schemes are announced by the **Finance Ministry** on a **quarterly basis**.
- Typically, small savings rates are linked to yields on benchmark government bonds, but despite the rise in G-Sec (government securities) yields in recent months, the government has not changed the interest rates on small savings schemes.
- Notably, the RBI has also raised the repo rate by 90 basis points during the April-June quarter. After the RBI hiked the repo rate, banks have started raising deposit rates.
- It is, however, important to note that if small savings rate are not raised, banks would not be forced to raise deposit rates, unless they need to mobilise funds for credit demand.
- If the government had raised small savings rates, banks would have been forced to raise fixed deposit rates.
- Shyamala Gopinath panel (2010) constituted on the Small Saving Scheme suggested a market-linked interest rate system.

Kisan Vikas Patra (KVP)

- It can be purchased from any post office.
- The minimum deposit is Rs. 1000 and in multiple of Rs. 100 with no maximum limit.
- The deposit shall mature on the maturity period prescribed by the Ministry of Finance from time to time as applicable on the date of deposit.
- Certificates are easily transferable

National Savings Certificate (NSC)

- The NSC has a maturity period of 5 years.
- The minimum deposit is Rs. 1000 and in multiple of Rs. 100. There is no maximum limit.

Senior Citizen's Savings Scheme

- An individual above 60 years of age can open an account.
- Retired Civilian Employees above 55 years of age and below 60 years of age, subject to the condition that investment is made within 1 month of receipt of retirement benefits.
- The maximum limit of investment allowed per individual (combined balances in all accounts) is Rs. 15 lakhs. The minimum deposit shall be Rs. 1000

Sukanya Samridhi Scheme

- Introduced for the benefit of the girl child.
- The minimum deposit is Rs. 250 and the maximum deposit up to Rs. 1.50 lakh in a financial year.
- The investment will mature after the completion of 21 years from the date of opening the account, or upon the marriage of the girl child after attaining the age of 18.
- The account will also have to be closed if the girl child becomes an NRI or loses her Indian citizenship.

National Small Savings Fund (NSSF)

- ◆ Established in 1999 within the **Public Account of India**, the NSSF is a fund body, which pools money from various small saving schemes
- ◆ It is administered by the Ministry of Finance, under the **National Small Savings Fund (Custody and Investment) Rules, 2001**, derived from Article 283(1) of the Constitution.
- ◆ The pool from all the schemes is credited to the NSSF and withdrawals under small saving schemes by depositors are made from this Fund.
- ◆ Further, the money parked in the NSSF is **used by the Centre and states to finance their fiscal deficit**, while the balance is invested in central and state government securities.
- ◆ It, therefore, helps the government to channelize the money towards itself for fulfilling its financing requirements.

States' Startup Ranking 2021

- The 2021 Ranking of States on Support to Startup Ecosystems was released by Ministry of Commerce. This is the 3rd edition.
- **Department for Promotion of Industry and Internal Trade (DPIIT)** has been conducting the States' Start-up Ranking Exercise since 2018.
- The exercise has grown in its impact over the last three editions, with 31 participating states and UTs this edition, the highest till date

Objective

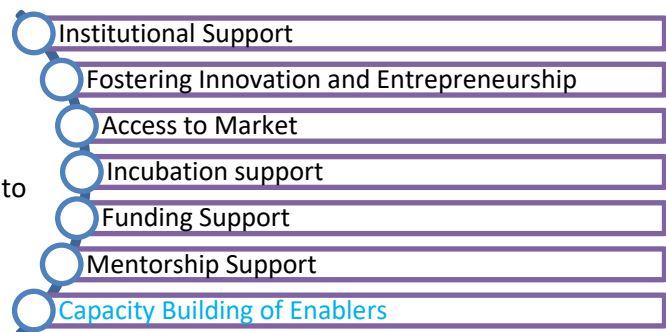
- It aims to support states and UTs in developing their start-up ecosystem and learn from their best practices.
- It also plays a crucial role in easing the business environment for start-ups in the country.

Ranking Categories: States and UTs are classified into **5 Categories:**



Evaluation Criteria

The participants were evaluated across the **7 Broad Reform Areas** which further consist of 26 Action Points.



Key Findings

- There were only 4 states with startup policies prior to 2016.
- In the current ranking, over 30 states and UTs are extending support through startup policies to the ecosystem.
- Support is being provided across mentorship, incubation and funding.
- India has become the **third-largest start-up ecosystem** in the world. Over the past five years the number of recognized startups has risen from just 726 in FY17 to 70,809 startups now.

	States	UTs and North-eastern (NE) States
Best Performers	Gujarat and Karnataka	Meghalaya
Top Performers	Kerala, Maharashtra, Orissa and Telangana	Jammu & Kashmir
Leaders	Assam, Punjab, Tamil Nādu, Uttarakhand and UP	Andaman & Nicobar Islands, Arunachal Pradesh and Goa
Emerging Start-up Ecosystem	Andhra Pradesh and Bihar	Mizoram and Ladakh

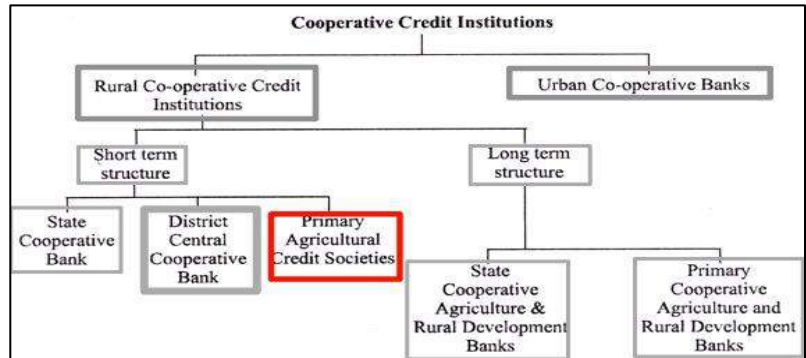
Department for Promotion of Industry and Internal Trade (DPIIT)

- DPIIT is a central government department under Ministry of Commerce and Industry.
- It is responsible for formulation and implementation of promotional and developmental measures for growth of the industrial sector.
- Individual administrative ministries look after the production, distribution, development and planning aspects of specific industries allocated to them. However, DPIIT is responsible for the overall industrial policy.
- It is also responsible for facilitating and increasing the FDI flows to the country.



Digitization of Primary Agricultural Credit Societies

- Cabinet Committee on Economic Affairs (CCEA) recently approved a proposal to digitize around 63,000 Primary Agricultural Credit Societies (PACS).
- PACS will be digitized at a cost of ₹2,516 crore. Each PACS will get around ₹4 lakh to upgrade its capacity and even old accounting records will be digitized and linked to a cloud-based software.
- This software will be in vernacular language having flexibility of customisation as per the needs of the states.

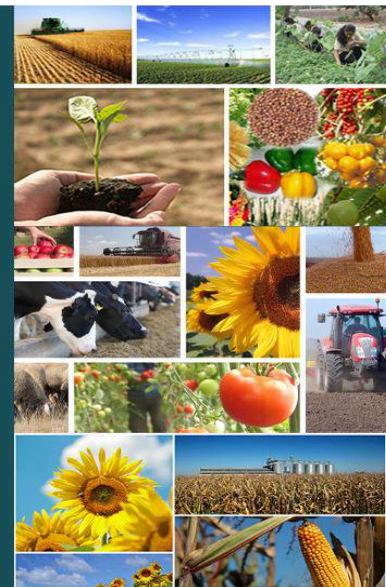


PACS

- PACS are the smallest unit in the cooperative sector and constitute the **lowest tier (village level) of the three-tier short-term cooperative credit (STCC)** in the country comprising of around **13 crore farmers as its members**.
- The other two tiers are - State Cooperative Banks (StCBs) at state level and District Central Cooperative Banks (DCCBs) at district level.
- **PACS account for 41% (3.01 crore farmers) of the kisan credit card (KCC) loans** given by all entities in the country and 95% of these KCC loans (2.95 crore farmers) through PACS are to the small and marginal farmers.
- PACS are outside the purview of the Banking Regulation Act, 1949 and hence not regulated by the RBI.

Functions of PACS

- The main function of the PACS is to **provide short and medium-term purpose loans** to its members.
- Borrowing an adequate amount of funds from central financial agencies in order to help its members in a timely manner.
- It also **supplies agricultural inputs** like seeds, fertilizers etc. to members.
- It helps its members by **providing marketing facilities** that could enhance the sale of their agricultural products in the market at proper prices.



Advantages of PAC	Challenges of PAC
<ul style="list-style-type: none"> • It helps the farmers to get credit for agricultural purpose at their place. • It helps in promoting <i>savings habits</i> among its members. • It helps in implementing any government schemes which are related to farmers at their level and also to observe whether these schemes are attaining their intended purpose or not. 	<ul style="list-style-type: none"> • Organizational weakness: Though PACS covers the major portion of the villages, still villages in the northeastern states are not covered. • Over dues: The larger overdues come from landowners rather than small cultivators, implying that a few farmers who are relatively stronger in the village took unfair advantage of these PACS. • Lack of resources: The PACS's resources are far too limited in relation to the rural economy's short- and medium-term credit needs. This is largely due to insufficient funds provided by higher-level funding agencies.

Need for Digitization of PACS

- The other two tiers -- StCBs and DCCBs have already been automated by the NABARD and brought on Common Banking Software (CBS).
- However, majority of PACS have not been computerized and still function manually resulting in inefficiency and trust deficit.

- In some of the states, standalone and partial computerization of PACS has been done. There is no uniformity in the software being used by them and they are not interconnected with the DCCBs and StCBs.

Benefits of Digitization

- Computerization of PACS will increase their transparency, reliability and efficiency, and will also facilitate the accounting of multipurpose PACS.
- It will help PACS to become a nodal centre for providing various services such as Direct Benefit Transfer (DBT), Interest Subvention Scheme (ISS), Crop Insurance Scheme (PMFBY), and inputs like fertilizers & seeds.
- The move will also help to generate around 10 jobs in each centre.

Common Reporting Standard (CRS)

- CRS is a **global reporting standard** for the automatic exchange of information (AEOI) developed by the Organization for Economic Cooperation and Development (OECD).
- The idea was based on the US Foreign Account Tax Compliance Act (FATCA) implementation agreements.
- Under CRS, jurisdictions have to obtain information from their financial institutions and **automatically exchange that information** with other jurisdictions on an annual basis.
- It sets out the financial institutions required to report, the different types of accounts and taxpayers covered, as well as common due diligence procedures to be followed by financial institutions.

Purpose of CRS

- Allow tax authorities to obtain a **clearer understanding of financial assets held abroad** by their residents.
- Combat perceived **offshore tax evasion**.
- Provide minimum set of standards and framework to **increase efficiency and decrease cost** associated with exchange of information.

NABARD's Achievements

- National Bank for Agriculture and Rural Development (NABARD) has managed to achieve new milestones in 2021-22 through its focused and initiative-driven approach.
- Expanding the lending, the bank's loan portfolio increased to Rs 6,80,731 crore as of March 31. The total disbursement stood at Rs 3,77,086 crore.
- NABARD reported an all-time-high refinance disbursement of Rs 2.68 lakh crore during 2021-22.

Developmental Measures

- NABARD has so far promoted 6,395 farmer producer organisations (FPOs) with a grant assistance of Rs 947 cr.
- On the micro-credit front, 1.18 crore SHGs have been covered cumulatively by the banks under the SHG - Bank Linkage Programme.
- While bank loans disbursed to SHGs was Rs 99,549 crore, average loan disbursed per SHG stood at Rs 2.94 lakh in 2021-22.
- Moreover, NABARD has been undertaking several initiatives such as piloting net zero-ground water use in watersheds, development of simple tools for climate change vulnerability analysis, climate proofing of its natural resource management, installation of automated weather stations, etc.
- Moreover, NABARD has undertaken the GI registration of 112 products.

- Cumulatively, close to 10 lakh rural youth have been trained so far to enable them to take up wage and employment activities.

NABARD

- Established in 1982, it is an apex regulatory body for overall regulation of regional rural banks (RRBs) and cooperative banks in India. It is under the jurisdiction of Ministry of Finance.
- It has been entrusted with policy, planning, and operations related matters in the field of credit for agriculture and other economic activities in rural areas in India.
- It is the most important institution in the country which looks after the development of the cottage industry, small scale industry and village industry, and other rural industries.

Rural Infrastructure Development Fund (RIDF)

- The government created RIDF in NABARD in 1995 for financing rural infrastructure projects.
- RIDF was set up to fund infrastructure projects in States, which are incomplete due to lack of financial resources.

Microfinance Institutions (MFIs)

- Microfinance companies are expecting greater growth in rural markets than urban, following new guidelines issued by the RBI in March, 2022.
- The central bank has allowed households earning up to ₹3 lakh annually to be classified as eligible for microloans, expanding the market for MFIs.



Microfinance

- ◆ Microfinance is a form of financial service which provides small collateral-free loans and other financial services (micro savings, micro insurance) to poor and low-income households. They are designed to promote financial inclusion.
- ◆ It can facilitate achievement of national policies that target poverty reduction, women empowerment, assistance to vulnerable groups, and improvement in the standards of living.
- ◆ Indian microfinance sector has witnessed significant growth over past two decades in terms of increase in the number of institutions providing microfinance and the amount of credit given to microfinance customers.
- ◆ The gross loan portfolio of the sector in India rose by 10% to ₹2.85 trillion as on 31 March 2022 from ₹2.59 trillion a year ago.

- The cap earlier was ₹1.25 lakh in rural areas and ₹2 lakh in other areas.
- It also removed the cap on pricing loans, aiding deeper penetration into existing markets and entry into new ones. These regulations can improve credit culture.

Delivery Channels

- In India microcredit is delivered through a variety of institutional channels like:

○ Scheduled commercial banks (SCBs) (including small finance banks (SFBs) and regional rural banks (RRBs)) lending both directly as well as through business correspondents (BCs) and self-help groups (SHGs).

○ Cooperative banks

○ Non-banking financial companies (NBFCs)

○ Microfinance institutions (MFIs)

Challenges Faced by MFI

- **Fragmented Data:** While overall loan accounts have been increasing, the actual impact is not clear as data on the relative poverty-level improvement of MFI clients is fragmented.
- **Impact of Covid-19:** Collections having taken an initial hit and disbursals yet to observe any meaningful thrust.

- **Social Objective Overlooked** in their quest for growth and profitability
- **Loans for Non-income Generating Purposes** much higher than what is stipulated by RBI which is 30% of the total loans of the MFI.
- **Vicious debt trap:** These loans are short-tenured and it is likely that customers soon find themselves in the vicious debt trap of having to take another loan to pay off the first.

Extra Mile

Pradhan Mantri Mudra Yojana (PMMY)

- Launched in 2015, MUDRA stands for **Micro Units Development & Refinance Agency Ltd.**
- It is a financial institution set up by the Government. Under the PMMY, banks provide collateral-free loans up to Rs 10 lakh.
- These loans are given to non-farm small/micro enterprises for income generating activities through various last-mile financial institutions like Banks, NBFCs and MFIs.
- Aim: To provide funding support to micro-entrepreneurs, with the government providing annual loan sanction targets to banks.
- There are three categories:

Shishu loan up to
Rs 50,000

Kishor loan of Rs
50,000-Rs 5 lakh

Tarun loan accounts of
Rs 5-10 lakh

Windfall Tax

The government slapped an export tax on petrol, diesel and jet fuel (ATF) shipped overseas, and imposed a windfall tax on crude oil produced locally.

- A windfall tax is a tax levied by governments against certain industries when economic conditions allow those industries to experience above-average profits.
- The idea is to target firms that were lucky enough to benefit from something they were not responsible for - in other words, a windfall.
- In other words, windfall tax is imposed on companies that have seen their profits extraordinarily not because of any clever investment decision or an increase in efficiency or innovation, but simply because of favourable market conditions.

Business Reforms Action Plan 2020

- The assessment of States/UTs under Business Reforms Action Plan (BRAP) 2020, was recently released.
- It shows how various Indian states/UT have performed in improving **Ease of Doing Business**.
- Conducted by the Department for Promotion of Industry and Internal Trade (DPIIT), this is the 5th edition of the BRAP exercise, which was first released in **2015**.
- The aim is to boost investor confidence, encourage business friendly climate and augment Ease of Doing Business across the country.

Methodology

- BRAP 2020 includes 301 reform points covering **15 business regulatory areas**, such as access to information, single window system, labour and land administration.

- Sectoral reforms with 72 action points spread across 9 sectors like trade license, healthcare, legal metrology, cinema halls, hospitality, fire NOC, telecom, movie shooting and tourism were introduced for the first time to expand the scope of the reform agenda.
- In a departure from the previous years, where States/UTs were ranked, this year they have been placed under the four categories viz. Top Achievers, Achievers, Aspirers and Emerging Business Ecosystems.
- The idea is not to create a hierarchy amongst States/UTs but to create an enabling framework, under which learnings can be shared amongst States/UTs which in turn will lead to a nationwide spillover of good practices.

Key Findings

Top Achievers	Andhra Pradesh, Gujarat, Haryana, Karnataka, Punjab, Tamil Nadu and Telangana
Achievers	Himachal Pradesh, MP, Maharashtra, Odisha, Uttarakhand and UP
Aspirers	7 states, including Assam, Kerala and Goa.
Emerging Business Ecosystems	11 states and UTs, including Delhi, Puducherry and Tripura

- 30 States & UTs have developed their state single window clearance systems, while six are developing them.
- 14 states have boarded the national single window. Likewise, 20 states and UTs have developed a central inspection system.

Open Acreage Licensing Programme

- The Ministry of Petroleum and Natural Gas recently launched the **eighth round** of bids under the Open Acreage Licensing Programme (OALP), offering 10 blocks for international competitive bidding.
- Till now, 134 Exploration & Production blocks have been awarded comprising 2,07,691 sq.km. of area spread across 19 sedimentary basins.
- Bid Round-VIII would add a further 36,316 sq. km of Exploration Acreage and cumulative exploration acreage under OALP regime will increase to 2,44,007 sq. km.

Hydrocarbon Exploration and Licensing Policy (HELP)

- India imports more than 80% of its crude oil requirements, which makes the country heavily dependent on foreign sources of supply.
- This leads to a huge financial burden on the country, apart from subjecting the country to global swings in crude oil price.
- To address these concerns, the HELP was launched in **2016**. HELP replaced the New Exploration Licensing Policy (NELP) of 1997-1998. HELP had **2 key drivers**, both were launched in 2017:

Open Acreage Licensing Programme (OALP)

National Data Repository (NDR)

- HELP's objective is to increase India's indigenous oil and gas production by maximising the potential of hydrocarbon resources in India.
- It aims to increase investment in the energy and petroleum sector and provide operational flexibility to the investors.

Provisions under HELP

- **Single license** that covers exploration and production of all types of hydrocarbon viz. conventional & unconventional resources eg oil and gas, coal-bed methane, shale oil, gas hydrates, etc.

- **Open Acreage Licensing Programme (OALP)**

- ✓ Under NELP, the bidders could choose only from the blocks offered by the government and had to wait for the government to undertake bidding for blocks which were of interest to the bidders.
 - To address this issue, the government introduced **OALP under HELP**.
- ✓ OALP gives investors the freedom to carve out blocks of their choice after assessing Exploration & Production data available at **National Data Repository** and submit an **Expression of Interest (Eoi)**. Eoi can be submitted thrice a year without waiting for a formal bid round from the government.
- ✓ These blocks are later offered through a biannual (twice a year) formal bidding process. The entity offering the maximum share of oil and gas to the government is awarded the block.

Benefits of OALP	Concerns Related to OALP
<ul style="list-style-type: none"> • <u>Removing red-tapism</u>: It has reduced multiple licences for extracting different hydrocarbons even from the same well. • <u>Brought in a quantum jump in the Exploration & Production</u> sector by the successful roll-out of the HELP regime, followed by OALP Bid Rounds 	<ul style="list-style-type: none"> • <u>Lesser involvement of Private Players</u>: Public Sector Companies like ONGC and Oil India (OIL) are the major winners of the bidding rounds. • <u>Less Participation of Foreign Companies</u>: Indian attempts to attract Foreign Energy Giants are not yielding expected results.

- **Revenue Sharing Model**

- ✓ Under NELP, contracts were based on the concept of **profit sharing** where profits are shared between the Government and the contractor after recovery of cost.
- ✓ Under the profit sharing methodology, it became necessary for the Government to examine cost details of private participants and this led to many **delays and disputes**.
- ✓ Under the **revenue sharing model of HELP**, the government is not concerned with the cost incurred in the process and directly receives a share of the gross revenue from the sale of oil, gas etc.
- ✓ This model is **simpler and easy to monitor**, as the government has to monitor only two parameters, revenue and production of the contractor.

- **Financial Incentives under HELP**

- ✓ To encourage exploration in deep water and ultra-deep water areas, **royalty rates have been reduced** and a **graded system of royalty** has been introduced, in which royalty rates decrease from shallow water to deep water and ultra-deep water.
- ✓ Exemptions: The royalty is **exempted for the first seven years** and subsequently royalty of 5% and 2% is applicable in deep water and ultra-deep water areas.
- ✓ Exemption of custom duty applicable on equipment/ services for exploration and production activities.
- ✓ Marketing and pricing freedom for crude oil and natural gas produced from these blocks.

- **National Data Repository (NDR)**

- ✓ NDR is the backbone of HELP. It provides data to contractors that they can analyse & bid for particular blocks in which they are interested.
- ✓ The data presented through NDR is obtained through advanced technology simulations which makes it more reliable

Legal Metrology (Packaged Commodities) (Second Amendment) Rules 2022

- The Department of Consumer Affairs recently released the **Legal Metrology (Packaged Commodities), (Second Amendment) Rules 2022**.

- The amendment has allowed the electronic industry to declare some mandatory details on the label through QR (Quick Response) code, for a period of one year, if not declared in the package itself.
- Earlier, all the pre-packaged commodities including the electronic products were required to declare all the mandatory declarations as per the Legal Metrology (Packaged Commodities), Rules 2011 on the package.
- The option is given for one year because the government is trying to use the technology for the first time on a **pilot basis** and will decide to extend it based on the feedback.
- It will allow important declarations to be declared effectively on the label in the package while the other descriptive information can be conveyed to the consumer through the QR Code.
- Information that can be displayed through QR codes include details such as address of the manufacturer or packer or importer, the common or generic name of the commodity, the size and dimension of the commodity and customer care details.

Previous Amendment In November 2021

1. The Department of Consumer Affairs has omitted **Rule 5** of the Legal Metrology (Packaged Commodities), Rules 2011 to safeguard interest of consumers.
 - ✓ **Rule 5** defines the Schedule II prescribing the **pack sizes of various types of commodities**.
2. Companies selling packaged commodities with a quantity of **more than one kilogram** are required to print 'unit sale price' per kg along with its maximum retail price (MRP).
3. Rule regarding mentioning of quantity on a packaged commodity was amended.
 - ✓ Now the quantities can be expressed in terms of number or unit or piece or pair or set or such other word which represents the quantity in the package.
 - ✓ Earlier Quantity should either be in 'number' or 'unit'
4. **Date Declaration** has now been required to month & year in which pre-packed commodity is manufactured.
5. **Declarations of MRP** has been simplified by removing illustration and providing for making the mandatory declaration of MRP in Indian currency inclusive of all taxes.

Legal Metrology Act 2009

- The Legal Metrology Act, 2009 was passed to **establish and enforce standards of weights and measures**. It also regulates **trade and commerce for goods which are sold or distributed by weights, and measures**.
- The **Department of Legal Metrology falls under the Department of Consumer Affairs**, and is therefore concerned with fair and honest practices in relation to all aspect of trade.
- The Act **came into effect from 2011**, by replacing the Standards of Weights and Measures Act, 1976 and Standards of Weights and Measures (Enforcement) Act, 1985.

- Under the Legal Metrology Act, 2009, there are various rules, but an important part of the act is the **Legal Metrology (Packaged Commodities) Rules, 2011**.
- The Rules **deal with goods that are packaged** and state the **declarations that have to be made on packaged commodities** that are meant for sale.
- The purpose of the Rules is to **ensure that the end consumer gets all relevant information** when he/she buys a product that is in packaged form.

Legal Metrology (Packaged Commodities) Rules, 2011

Jagriti Mascot

- The Department of Consumer Affairs (DoCA) has launched a mascot, '**Jagriti**', to empower consumers and generate awareness of their rights.
- Jagriti would be projected as an **empowered consumer**, who spreads awareness regarding consumer rights and addresses solutions to the issues they face.

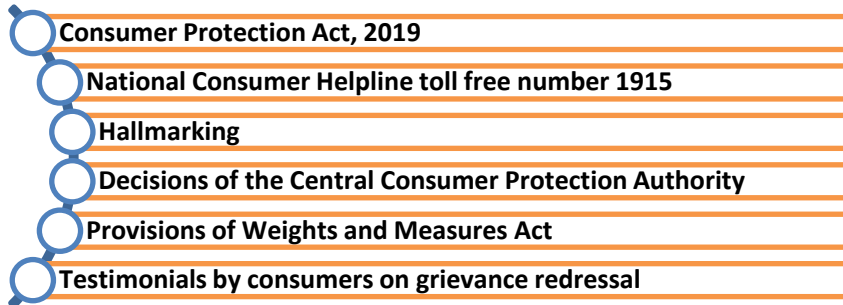
- The mascot will be shown along with tagline “Jago Grahak Jago” in all the media campaigns.

Objective

- Through Jagriti, DoCA aims to strengthen its consumer awareness campaign presence in digital and multimedia.
- Reinforce a young empowered & informed consumer as a top-of-mind consumer rights awareness recall brand.

Awareness Themes

The mascot would generate consumer awareness on the following **themes**:



Hallmark: A hallmark is an **official mark** or series of marks struck on items made of metal, mostly to **certify the content of metals**—such as platinum, gold, silver.

India Innovation Index 2021

- The 3rd edition of India Innovation Index was released recently by **NITI Aayog**.
- It is an assessment framework which ranks states and UTs on their innovation performance.
- The index also contributes to the government’s effort to monitor select global indices through the **Global Indices to drive Reform and Growth (GIRG)** mechanism, for which the NITI Aayog is the nodal organization.

Methodology

- The current edition highlights the scope of innovation analysis in the country by drawing on the framework of the Global Innovation Index.
- The new framework presents a more detailed outlook with **66 unique indicators** compared to 36 indicators used in the previous index for 2020. The indicators are now distributed across **16 sub-pillars**, which, in turn, form **seven key pillars**.
 - Similar to the previous edition, the **five Enabler pillars** measure inputs and the **two Performance pillars** measure output.
- All the indicators in the Enabler pillars cover features crucial for “promoting innovation” within a state/UT.
- Indicators in the Performance pillars represent a nation’s output in “knowledge creation and competitiveness”.
- The index ranks States and UTs into **three categories**:



Major States

North East and Hill States

UTs and City States

Key Findings

- **Karnataka** has topped again in the Major States category, followed by Telangana and Haryana.
- **Manipur** is leading the North East and Hill States category, followed by Uttarakhand and Meghalaya.
- **Chandigarh** is the top performer in the UTs and City States category, followed by Delhi and Andaman and Nicobar.

Challenges

- The current report noted that India's average innovation score is insufficient. The overall index score is about 14.56.
 - ✓ India was ranked 46th in Global Innovation Index (GII) 2021 rankings released by the World Intellectual Property Organization (WIPO).
- The country has not performed well in the "knowledge workers" pillar, as much as it has in the human capital pillar.
- The expenditure on human capital has been unable to create that knowledge base in the country.
- Moreover, the innovation is skewed against the manufacturing sector due to the missing middle.
- India's manufacturing sector has been characterised by the missing middle: a concentration of small/micro firms at one end of the spectrum, and some large firms in each sector at the other.
- India's **Gross Domestic Expenditure on R&D (GDERD)**, as a % of GDP stood at about 0.7%.
- Countries that spend less on GDERD fail to retain their human capital in the long run and the ability to innovate is dependent on the quality of human capital.

Way Ahead

- **GDERD** needs considerable improvement and should touch at least 2%, which would play a role in India achieving the goal of a 5 trillion economy and further influence its innovative footprint across the globe.
- Taking evidence from countries like South Korea, USA, and Germany, where the presence of private players is quite evident, the report noted that public expenditure in R&D is productive only up to a certain extent.
- Thus, it has recommended increased role of the private sector in R&D resulting in innovation.
- Closing the gap between industry demand and what the country produces through its education systems.

Zero Coupon Zero Principal instruments

- The Finance Ministry has declared zero coupon zero principal (ZCZP) instruments as securities for the purposes of the Securities Contracts (Regulation) Act, 1956.
- ZCZP is an instrument issued by a not-for-profit organisation - that will be registered with the social stock exchange - to raise funds.

ZCZP Structuring

- With its zero-coupon, zero-principal structure, it resembles a debt security like a bond. When an entity takes a loan by issuing regular debt security like a bond, it has to make interest payments and the principal when the bond matures.
- But with ZCZP, when an entity issues these securities and raises money, it is not a loan but a donation.
- So, the borrowing entity **does not have to pay interest**—therefore zero coupon—and it **does not have to pay the principal** (zero principal) either.
- Like any other debt instrument, it will come with a **time duration**, and will carry a tenure equal to the duration of a given project.



Social Stock Exchange (SSE)

- ▷ Cleared by SEBI in September 2021, SSEs are meant to be exchanges—like the NSE and BSE—except they will **list only securities that raise money** for Nonprofit organization (NPOs) and for-profit social enterprises -- **having social intent and impact as their primary goal.**
- ▷ The social enterprises will have to engage in a social activity out of the list of 15 broad activities approved by SEBI
- ▷ With regard to fund raising, it has been proposed that eligible NPOs may raise funds through equity, zero coupon zero principal bonds, mutual funds, social impact funds, and development impact bonds.
- ▷ NPOs will have to register with the exchange, in order to raise funds.

Benefits

- There have been concerns around lack of transparency in the way donations are used by these (non-profit or for-profit social) enterprises.
- The organisations listed on the exchange will need to do regular audits of social impact and these will be disclosed to all stakeholders.
- Also, if an organisation issues these instruments and has few subscribers, it can be a warning for other donors.

Zero-coupon bond: It is a debt security that does not pay interest but instead trades at a deep discount, rendering a profit at maturity, when the bond is redeemed for its full face value.

Schemes on Strengthening Pharmaceuticals Industry

- **The Ministry of Chemicals & Fertilizers recently** launched three schemes to strengthen Micro, Small and Medium Enterprises (MSMEs) in the pharmaceutical sector.
- The schemes have been rolled out under the Scheme of '**Strengthening Pharmaceuticals Industry**' (SPI).
- **Objective:** The aim is to further enhance India's capabilities in the pharmaceuticals sector with an objective to make it more competitive in terms of both quality and cost and also make Indian pharma MSMEs, a part of global supply chain.
- The schemes envisage technology upgradation, setting up of common research centres and effluent treatment plants (ETPs) in clusters for the pharma MSMEs.
- **SIDBI** will be the project management consultant for implementing the scheme.

Pharmaceutical Technology Upgradation Assistance Scheme (PTUAS)

- It would facilitate pharmaceutical MSMEs with proven track record to **upgrade their technology.**
- It has provisions for a capital subsidy of 10% on loans up to a maximum limit of Rs 10 crore with a minimum repayment period of 3 years; or
- Interest subvention of up to 5% (6% in case of units owned by SC/ST) on reducing balance basis.

Assistance to Pharma Industries for Common Facilities Scheme (API-CF)

- It would **strengthen the existing pharmaceutical clusters' capacity** for sustained growth, with the focus on R&D labs, testing laboratories, ETPs, logistic centres and training centres.
- It provides for an assistance of up to 70% of the approved project cost or Rs 20 crore, whichever is less.
- In case of Himalayan and north-east region, the grant-in-aid would be Rs 20 crore per cluster or 90% of the project cost, whichever is less.

Pharmaceutical and Medical Devices Promotion and Development Scheme (PMPDS)

- Under PMPDS, **knowledge and awareness** about the pharma and medical device industry will be promoted.
- It would involve undertaking studies, building databases and bringing industry leaders, academia and policy makers together to share their knowledge and experience for overall development of the sector.

Benefits

- The schemes would strengthen the existing infrastructure facilities to make India a global leader in the pharma sector.
- They will increase investment, encourage research and innovation and enable the industry to develop futuristic products and ideas.
- They will go a long way in making the Indian pharmaceutical industry AtmaNirbhar, more resilient and future-ready.

Trade Settlement In Rupee

The RBI, recently, announced its decision to allow trade settlements between India and other countries in rupees, with immediate effect.

Current System

- Till now, if a company exports or imports, transactions are always in a foreign currency - excluding with countries like Nepal and Bhutan.
- So, in case of imports, the Indian company has to pay in a foreign currency - mainly dollars and could also include currencies like pounds, Euro, yen etc.
- The Indian company gets paid in foreign currency in case of exports and the company converts that foreign currency to rupee since it needs rupee for its needs, in most of the cases.

Background

- The current move comes amid increasing pressure on the Indian currency, as the rupee continues to depreciate due to a strengthening dollar.
- Moreover, high crude prices widened India's trade deficit to record highs of \$25.6 billion in June.
- With imports being strengthened through domestic demand and exports likely to decline due to risks of a global slowdown and recent correction in commodity prices, India's current account deficit is expected to remain at 3%.
- Further, capital outflows are likely to continue due to the continuing global monetary policy tightening and flight to safety, which will put more pressure on the rupee.

New Mechanism

- Under this mechanism, Indian exporters and importers can use a **Special Vostro account** linked to the foreign correspondent bank of the partner country for receipts and payments denominated in INR.
 - ✓ A **Vostro account** is one opened by a bank in its home country on behalf of a foreign bank.
- **Indian Importers** via this mechanism will make payment in INR which will be credited into the Special Vostro account of the correspondent bank of the partner country, against the invoices for the supply of goods or services from the overseas seller.
- **Indian Exporters** via this mechanism will be paid in INR from the balances in the designated Special Vostro account of the correspondent bank of the partner country.
 - ✓ **Indian exporters** may also receive advance payment against exports from overseas importers in INR through the mechanism.
 - ✓ Moreover, before allowing any such receipt of advance payment against exports, Indian banks need to ensure that available funds in these accounts are first used towards payment obligations arising out of already executed export orders / export payments in the pipeline.

- However, banks acting as authorised dealers for such transactions would have to take approval from the Foreign Exchange Department of RBI on doing such transactions.

Countries Expected To Use The New Model

- While the RBI order has not clearly said so, this arrangement is likely to be used only with Russia for the time being.
- There are sanctions on Russia post the Ukraine war and the country is off the SWIFT system (system used by banks for payments in foreign currency).
- Russia enjoys a trade surplus with India and would be unlikely to prefer payments in currencies such as the dollar or the euro when it is facing sanctions from the West.
- Opening a rupee account where Russia accumulates trade surpluses with India and using those to invest in Indian assets in India, may make more sense to Russia.
- For India, doing business with Russia using rupees would mean there is no hard currency outflow in such transactions.

Benefits

- RBI expects its latest measure to promote growth of global trade with emphasis on exports from India and to support the increasing global interest in the Indian Rupee.
- While the move is seen to benefit trading primarily with Russia, it is also likely to help check dollar outflow and slow rupee depreciation to a very limited extent.
- If other countries too begin showing interest in using the facility, then a strengthening impact may be seen more quickly for the rupee.
- **Use of Surplus Balance:** Furthermore, it will also facilitate investments in the country as the rupee surplus balance held in the Special vostro accounts may be used by the foreign entities for payments for projects and investments in India.
 - It can also be used for investment in Indian government treasury bills and government securities.
- The move would also reduce the risk of forex fluctuation specially looking at the Euro-Rupee parity.

Vostro vs Nostro account

- Vostro is a Latin word that translates to “your,” as in “your account.”
- A vostro account is an account a correspondent bank holds on behalf of another bank.
- For example, if a Spanish life insurance company approaches a U.S. bank to manage funds on the Spanish life insurer’s behalf, the account is deemed by the holding bank as a vostro account of the insurance company.
- From the foreign correspondent bank’s point of view, funds held on behalf of other banks are referred to as vostro accounts and are denominated in the **local currency**.
- From the perspective of domestic banks, the funds deposited at correspondent banks are referred to as **nostro accounts**. Nostro accounts are denominated in the **foreign currency** of the correspondent bank.

Measures To Boost Foreign Exchange Inflows

The RBI recently announced a series of steps to prevent the rupee’s slide against the dollar and boost foreign exchange inflows.

Measures

Exemption from CRR & SLR on Incremental Foreign Currency Non-Resident (Bank)-FCNR(B) and Non-Resident (External) Rupee (NRE) Term Deposits

- Currently, banks are required to include all FCNR (B) and NRE deposit liabilities to calculate the Net Demand and Time Liabilities (NDTL) for maintenance of statutory requirements such as cash reserve ratio (CRR) and statutory liquidity ratio (SLR).
 - ✓ FCNR(B) are foreign currency non-resident deposits (denominated in foreign currency), while NRE deposits are non-resident external deposits (rupee denominated)
- Incremental FCNR(B) and NRE deposits raised between 1 July and 4 November 2022, will be exempt from the maintenance of CRR and SLR.

Interest Rates on FCNR(B) and NRE Deposits

- RBI also removed the ceiling on interest rates on FCNR(B) & NRE Deposits between 7 July -31 October.
- These relaxations will allow non-residents to get better returns, attracting foreign funds to the domestic banking system.

External Commercial Borrowings (ECBs)

- The RBI has decided to temporarily increase the limit under the automatic route for external commercial borrowing (ECB) from US\$ 750 million per financial year to US\$ 1.5 billion.

FPI Investment In Debt

- Currently, all central government securities (G-Secs) with 5-year, 10-year and 30-year tenors are categorized as "specified securities" under the Fully Accessible Route (FAR).
- To increase the choice of G-Secs available for investment by non-resident investors under the FAR, the RBI has been decided that all new issuances of G-Secs of 7-year and 14-year tenors, will be designated as specified securities under the FAR.
- At present, FPI investment in government and corporate debt under the MTF (Medium Term Framework) is subject to a macro prudential short-term limit.
 - ✓ That is, not more than 30% of investments each in government securities and corporate bonds can have a maturity of less than one year.
- It has been decided that investments by FPIs in government securities and corporate debt made till October 31, 2022 will be exempted from this short-term limit.

Foreign Currency Lending

- Further, category-1 banks can utilise overseas foreign currency borrowing (OFCBs) for lending in foreign currency to entities for a wider set of end-use purposes, except the negative list set out for ECBs.
- The measure is expected to facilitate foreign currency borrowing by a larger set of borrowers who may find it difficult to directly access overseas markets.

NHAI To Offer Projects On BoT Model

The National Highways Authority of India (NHAI) is in the process of offering at least two highway upgradation projects to private players, using the build-operate-transfer (BOT) model.

Background

- The current decision comes after funding highway projects through public money for a good part of the last decade.
- The BOT (toll) model was the preferred model for road projects, accounting for 96% of all projects awarded in 2011-12, but this progressively reduced to zero.
- When the interest in BOT projects started to reduce, road construction shifted to the traditional engineering, procurement and construction (EPC) mode.

- Over the last few years, especially since the onset of the pandemic, the NHAI resorted to offering projects under the Hybrid Annuity Model (HAM).

Public-Private partnership (PPP) Model

- These are agreements between public and private entities, in which the private entity is hired by the public body and is remunerated on a performance basis.
- They are typically long-term arrangements (for a 20-30 years term), whose rationale is to combine the capabilities of the public and private sector to achieve optimal results.
- Some of the important types of PPP contracts are **BOT**, Build-Own-Operate (BOO), Build-Operate-Own-Transfer (BOOT), Buy-Build-Operate (BBO).

Build-Operate-Transfer (BOT) Model

- A BOT contract is a model used to finance large projects, typically infrastructure projects developed through **public-private partnerships (PPP)**.
- Under it, a private player is granted a contract to finance, build and operate a project for a specified period of time (20 or 30 year concession period).
- During this period, the developer can recover its investments through user charges or tolls charged from customers using the facility.
- After the said period, the project is returned to the government or the relevant authority.
- Thus, there is an element of financial risk on the part of the developer to invest through the BOT model.
- The last time NHAI tried to assign road projects through BOT was in 2020.
- As part of the incentives, the government decided to assess the revenue potential of a project every five years during the concession period as against every 10 years earlier.
- This would mean that the concession period (or period till which road developers can collect toll) is extended early in the tenure of the contract, ensuring surety of revenue for the private company.

Engineering, Procurement and Construction (EPC) Model

- EPC is a PPP model for the development of infrastructure projects especially highways. Under EPC, the **government bears the entire cost of the project**.
- Government invites bids for engineering knowledge from the private players. The **private sector's participation** is minimum and is limited to the provision of engineering expertise.
- Procurement of raw material and construction costs are met by the government.
- Although, the contractor is completely insulated from the financial risk, the difficulty of the model is the high financial burden for the government.

EPC vs PPP	
In the PPP model	In an EPC model
<ul style="list-style-type: none"> While implementing the project, if there is a delay in the project, the private entity will have to fix the problem, which will incur expenditures. It will now have to submit a new offer to be compensated for the costs incurred and have to deal with the government's slow machinery in order to get the new proposal approved. 	<ul style="list-style-type: none"> Private party can concentrate on project planning and design, boosting the project's efficiency and significantly reducing the time (avoiding cost overrun) required for completion. As a result, the EPC is more appealing to the private sector

Hybrid Annuity Model (HAM)

- The Hybrid Annuity Model is a **mix of BOT and EPC models**.

- The government contributes 40% of the project cost in the first five years through annual payments (annuity). The remaining payment is made on the basis of the assets created and the performance of the developer.
- As the government pays only 40%, during the construction stage, the developer has to find money for the remaining amount in the form of equity or loans.
- There is no toll right for the developer. Under HAM, revenue collection is the responsibility of the NHAI.
- As per the government's policy HAM is used in stalled projects where other models are not applicable.
- **Importance**
 - ✓ The BOT model hit roadblocks when NPA-ridden banks were suspicious of lending to these projects.
 - ✓ HAM is a good trade-off because it spreads risk among developers and the government which reduces overall debt and improves project returns.

India Can Prevent 30k Road Deaths Per Year

- According to a recent report published in medical journal Lancet, India could have prevented at least 29,400 road deaths (nearly 20% of total road fatalities) in 2018 if it had implemented interventions focusing on speeding, drunk driving, seat belt, and helmet use.
- The report was released ahead of the UN General Assembly's (UNGA) high-level meeting on *Global Road Safety* in New York, at which member countries pledged to **reduce road deaths and injuries by half by 2030**.

UNGA adopts resolution on improving global road safety:

- The UNGA adopted a new resolution on road safety in **2020**.
- It recognizes the role of the **Department of Safety and Security (UNDSS)** in implementing the UN Road Safety Strategy.
- The resolution also includes the following key provisions:
 - Endorses the **Stockholm Declaration** (adopted in 2020). It connects road safety to the implementation of the 2030 Agenda for Sustainable Development.
 - Proclaims **Road Safety 2021 - 2030** (a Second Decade of Action), with a goal to reduce deaths and injuries by 50% by 2030.
 - This is an adjustment to the Sustainable Development Goal (SDG) 3.6 - halving the number of global deaths and injuries from road traffic accidents by 2020.
 - Agrees to convene a high-level meeting of the UNGA on road safety by the end of 2022.

Background

According to Ministry of Road Transport and Highways (MoRT&H) statistics, **India remains one of the worst-performing countries in this area**, with 1,47,913 people killed in road traffic accidents in 2017.

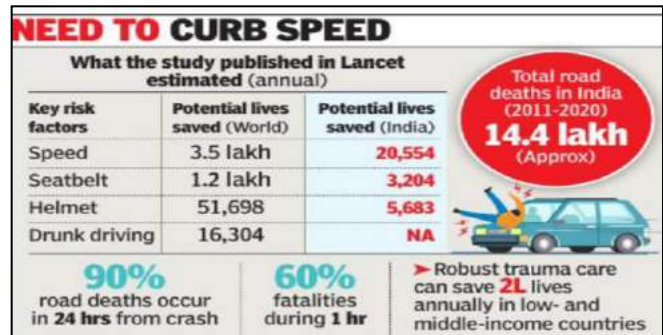
Key Highlights Of The Lancet Report

- Every year, approximately 14 lakh people are killed and nearly 5 crores are injured in traffic accidents worldwide. More than half of those killed are pedestrians, cyclists, and motorcyclists.
- Low and middle-income countries (LMIC) bear the greatest burden of road fatalities and injuries, with high economic costs ranging from 3-5% of GDP.
- In 2019, **India** amended its motor vehicle law, but its implementation by state governments is inconsistent and incomplete. The Motor Vehicles Act established a National Road Safety Board with advisory powers to reform road safety.
- Indian state governments continue to prioritize user behavior (drivers and other road users), education and uneven enforcement.

- ✓ **Low priority is given to structural changes** such as raising engineering standards for roads, signage and signals, training for scientific accident investigation, improving policing skills, etc.
- According to MoRT&H, rural areas accounted for more than 65% of those killed in road accidents in 2019.
- ✓ However, the death rate in densely populated urban areas (32.9%) suggests that better engineering and enforcement can easily reduce fatalities.

Proposals For India

- The report proposes that India and other countries could cut accident-related deaths by 25 to 40%.
 - ✓ This is based on evidence that preventive interventions produce good outcomes when applied to four well-known risk factors - high speed, driving under the influence of alcohol, not using proper helmets, not wearing seatbelts and not using child restraints.
- Major interventions in India, first proposed by the **Sundar Committee (2007)** and ordered by the Supreme Court (S. Rajasekaran vs Union of India, 2014), needs immediate implementation.
 - ✓ The measures include establishing a centralized national body for road safety and establishing decentralized responsibility at the district level.
- Recently, the National Road Safety Board Rules, 2021 call for the formation of technical working groups to address issues such as crash investigation and forensics, which is a positive beginning.



Bharat NCAP

MoRT&H seeks comments on a proposal to introduce the Bharat New Car Assessment Program (Bharat-NCAP). India's present **Central Motor Vehicle Rules (CMVR)** mandate a safety and performance assessment. However, this does not involve a crash test rating.

About Bharat NCAP

- **Description:** It is a new car safety assessment programme which proposes a mechanism of awarding 'Star Ratings' to automobiles based upon their performance in crash tests. The proposed assessment will allocate Star Ratings from 1 to 5 stars.
- **Meeting Global Standards:** BNCAP standard is aligned with global benchmarks and it is beyond minimum regulatory requirements.
- **Implementation:** BNCAP will be rolled out from April 1, 2023.
- **Mechanism:** The car is crashed into an aluminium deformable barrier impersonating an opposing force of the same magnitude of a crash-like situation, with a 40% overlap.
 - ✓ Also, Bharat NCAP would conduct its **frontal offset crash testing** at 64 kmph instead of the prevailing 56 kmph norm.
 - Offset collisions are those where one side of a vehicle's front and not the full width hits barrier.
- **Applicability:** It will be applicable on type-approved motor vehicles of category M1 with gross vehicle weight less than 3.5 tonnes, manufactured or imported in the country.
 - ✓ M1 category motor vehicles are used for the carriage of passengers, comprising eight seats, in addition to driver's seat.
- **Significance:** It is intended to increase the **export-worthiness** of vehicles and **competition** on safety parameters among manufacturers, as well as instill **consumer confidence** in their safety.

POLITY AND GOVERNANCE

2nd Phase of Goal Programme

Minister of Tribal Affairs launched the 2nd phase of the **Going Online As Leaders (GOAL)** program.

About The Programme

- It is a **joint initiative of the Ministry of Tribal Affairs & Meta (FaceBook)**, fully funded by Meta.
- The program aims to upskill and digitally enables tribal youth via *Facebook live sessions* and *Meta Business Coach*, a digital learning tool.
- There will be special focus on more than 10 lakh members of 50000 Vandhan Self Help Groups.
- *Goal 2 program will be open to all people from tribal communities.*
- It will **create a platform for self-help groups (SHGs)** and families associated with Tribal Co-operative Marketing Federation of India (TRIFED) to **take their products global**.
- They will be digitally trained with regard to market demand, packaging, branding and marketing of their products.
- **Implementing Agency:** The Ministry of Tribal Affairs in coordination with the Ministry of Electronics and Information Technology (MeITY), will be providing 6 digital classes in each of the 175 Eklavya Model Residential Schools (EMRS) selected under the program.
 - ✓ The project is being implemented by Education and Research Network (ERNET), which is an autonomous organization under MeITY.

Significance of The Programme

- It will help to close the **digital gender gap** by enabling more “women” to *get online and access digital services*.
- It will **empower the “youth”** from tribal communities to become village-level *digital leaders and entrepreneurs* for their communities.
- It **ignites competitiveness of tribal communities** by offering them an opportunity to come forward to showcase their creative potential leveraging digital platforms.
- It will **enhance their market linkages** and further serve the purpose to make Indian economy Atma Nirbhar by promoting local products.

1st GOAL Program

- It was launched in May 2020 to digitally skill and empower 5000 youth from tribal communities. It was completed by December 2021.
- It aimed at digital empowerment of tribal youth and women through the concept of mentor and mentee. In Phase-I, digital mentorship was provided *online* by attaching one mentor to 2 mentees.
- Trainings were provided for three pillars:

Communication & Life Skills

Enabling Digital Presence

Leadership & Entrepreneurship

- A pilot run of the program was done in 2019 to mentor 100 tribal girls through the support of 25 women leaders.

Authorisation To Issue Of Electoral Bonds

The Union government approved authorised the State Bank of India (SBI) for issue the 21st tranche of electoral bonds.

About Electoral Bonds

- Announced in 2017 Union Budget, the Electoral Bond Scheme (EBS) was notified by the Central government in **2018**.
- These bonds are sold in denominations of Rs 1,000, Rs 10,000, Rs 1 lakh, Rs 10 lakh, and Rs 1 crore, without any maximum limit & can be **bought from authorised branches of State Bank of India**.
- A donor is required to pay the amount **via cheque or digital mechanism (cash is not allowed)**.
- The political parties can choose to **encash such bonds within 15 days** of receiving them.
- The bonds that are **not encashed by a party within 15 days are deposited by the SBI into the Prime Minister's Relief Fund. Hence these are interest-free bearer instruments**
- The name of the **donor** is not mentioned on bond.
 - ✓ Donors who contribute less than Rs. 20,000 to political parties through purchase of electoral bonds need not provide their identity details such as PAN, etc
- The eligible party is allotted a verified account by the Election Commission of India (ECI) and the electoral bonds are transacted through this account only.
- It can be **purchased by any company incorporated in India or any citizen of India**, either singly or jointly with other individuals.

Other Major Features of Electoral Bonds

- The **first 10 days of January, April, July and October has been specified for purchase of electoral bonds**.
- An additional period of 30 days shall be specified by the government in the year of Lok Sabha elections.
- In February 2017, the then finance minister said that the **donations would be tax deductible**. Hence, a donor will get a deduction and the recipient, or the political party, will get tax exemption, provided returns are filed by the political party.
- **Eligibility Criteria:** Any party that is **registered under section 29A of Representation of the Peoples Act, 1951** and has **got at least 1% of the votes** polled in the most recent General elections or Assembly elections can receive electoral bonds.

Advantages of the Electoral Bonds	Challenges Associated with the Electoral Bonds
<ul style="list-style-type: none">• It helps the political parties to operate in a more transparent manner.• It can help to hold back political parties who operate with the goal of simply collecting funds from the public.• It works with the government goal to make election funding entirely safe and digitized; Cash will not be encouraged.	<ul style="list-style-type: none">• Through an amendment to the Finance Act 2017, the Union government has exempted political parties from disclosing donations received through electoral bonds.• Voters will have no idea of how, and through whom, a political party has been funded.• By keeping this knowledge from citizens and voters, it is compromising Right To information.• Since the identity of the donor is kept secret, it can lead to inflow of black money.• It eliminates the 7.5% cap(average net profits made during three simultaneous preceding financial years) on company donations which means now companies can make unlimited donations

Way Forward

- The government may reconsider and amend certain provisions of the Electoral Bonds Scheme to **ensure full disclosure and transparency**.
- Bonds must ensure that funds being collected by political parties are **accounted for through proper channels for clean money**, without transactional liability.
- The SC (in its interim order) has asked political parties to **reveal details of the donations** they received through electoral bonds to the ECI. On the other hand, the ECI has been asked to keep all the details in a sealed cover until further orders of the top court

Suspension of MPs

- Over this week, the two Houses of Parliament have suspended 27 MPs (23 from the Rajya Sabha and 4 from the Lok Sabha MPs)
- In order to ensure that proceedings are conducted in the proper manner, the Speaker/ Chairman is empowered to force a Member to withdraw from the House.

Rules Under Which The Presiding Officer/Chairman Acts

For Lok Sabha

Rule Number 373 of <i>Rules of Procedure & Conduct of Business</i>	<ul style="list-style-type: none">▪ It empowers presiding officers to direct an MP to withdraw from the House for any disorderly conduct.▪ Any Member so ordered to withdraw shall remain absent during the remainder of the day's sitting
Rules 374 and 374A - To deal with more recalcitrant (uncooperative) Members.	<ul style="list-style-type: none">▪ Rule 374 empowers the Presiding officers to <u>name the legislators</u> if the MP continues disrupting the House even after repeated warnings.▪ After that, the House can <u>move a motion to suspend</u> the MP for a period not exceeding the remainder of the session▪ Rule 374A was incorporated in the Rule Book in December 2001. The intention was to circumvent the necessity of adopting a motion for suspension.• Under this rule, the Speaker can name an MP, who shall then automatically stand suspended for 5 days or the remaining part of the session, whichever is less.• Provided that the House may, at any time, on a motion being made, resolve that such suspension be terminated.

For Rajya Sabha

Rule 255 of Rule Book of Rajya Sabha	<ul style="list-style-type: none">▪ It empowers the Chairman of Rajya Sabha to direct any Member to withdraw immediately from the House for any disorderly conduct.
Rule 256	<ul style="list-style-type: none">▪ It empowers the Chairman to <u>name the members</u> who persistently disregards the authority of the Chair or abuses the rules of the Council.▪ After that, the House may adopt a motion suspending the Member for a period not exceeding the remainder of the session.○ It should be noted that, unlike Lok Sabha (under rule 374A), <u>Rajya Sabha can not suspend its members without passing a motion for the same</u>.

Can Courts Intervene In A Matter Of Suspension Of MPs

- **Article 122** of the Indian Constitution says parliamentary proceedings cannot be questioned before a court.
- In some cases, however, courts have intervened in the procedural functioning of legislatures.
- For example, the Maharashtra Legislative Assembly passed a resolution in its 2021 Monsoon Session suspending 12 BJP MLAs for a year. The matter came before the Supreme Court, which held that the resolution was ineffective in law beyond the remainder of the Monsoon Session.

Terms Of Suspension

- The maximum period of suspension is for the remainder of the session.
- Suspended members cannot enter the chamber or attend the meetings of the committees.
- He will not be eligible to give notice for discussion or submission.
- He loses the right to get a reply to his questions

Reasons Behind The Disruptions

Political analysts and experts have discussed and identified four broad reasons leading to disorder in legislatures. These are:

- a) The lack of time available to MPs for raising important matters;
- b) Unresponsive attitude of the government & retaliatory posture by Treasury benches;
- c) Deliberate disruption by parties for political or publicity purposes; and
- d) The absence of prompt action against MPs disrupting parliamentary proceedings.

NITI Aayog-commissioned Report - Cost of Environment Conservation

NITI Aayog commissioned a report titled '**Economic Impact of Select Decisions of the Supreme Court and National Green Tribunal of India**'.

- NITI Aayog had commissioned **CUTS (Consumer Unity and Trust Society) International**, a Jaipur-based policy research and advocacy group.

Major Highlights of The Report

- At least **75,000 people were adversely impacted** with around **16,000 workers losing their jobs**, due to five major environment-related judgements.
- 5 judgements By The SC and NGT,
 - ✓ Stopping iron ore mining in Goa.
 - ✓ Shutting down Sterlite Copper's Tuticorin plant in Tamil Nadu
 - ✓ Halting consultation of Mopa Airport in Goa
 - ✓ NGT sand mining ban case
 - ✓ Halt on construction activities in Delhi-NCR.
- The **industry lost close to Rs 15,000 crore in revenues**, and workers lost around Rs 500 crore of income.
- The **government lost revenue worth Rs 8,000 crore** from mid-2018 to mid-2021.
- If this revenue had been spent as capital expenditure, the economic returns would have been to the tune of Rs 20,000 crore.

Suggestions Given In This Report

- The **judiciary needs to be equipped well to balance economic & ecological interests** of the country.
- For better quality of judges, the **law on National Judicial Commission** could be revived.

- It recommended that **selection procedures of judges should also be changed.**
- **Courts should undertake economic impact analyses facilitated by a group of experts** including economists, environmentalists, and sociologists, to address and adjudicate public interest cases involving economic sensitive matters.

Supreme Court Judgement On Nupur Sharma Case

The Supreme Court declined a plea by former BJP spokesperson Nupur Sharma to club the hate speech cases filed against her across the country.

Background

- Nupur Sharma has **made ‘derogatory remarks’ about the Prophet** on a television debate, but later she issued an apology and withdrew her statements.
- Despite that several FIRs were registered against her in many states.

On What Grounds Are Such Cases Clubbed

- **Article 20(2) of the Constitution guarantees the right against double jeopardy (A person cannot be prosecuted more than once for the same offence)**
- Multiple FIRs on the same incident would virtually mean multiple trials. In **T. T. Anthony v State of Kerala, 2001** verdict, the Supreme Court held that there cannot be a “second FIR” on the same issue.
- Approaching the Supreme Court in such situations is a procedural safeguard against excessive litigation.

Plea Bargaining Provision In India

- It is an agreement in a criminal case in which a prosecutor and an accused arrange to settle the case. The accused changes his plea from *not guilty to guilty* in return for an offer by the prosecution to a lesser offense or (in the case of multiple offenses) to one or more of the offenses charged in exchange for more lenient sentencing, or a dismissal of other charges
- The **154th Report of the Law Commission was first to recommend the plea bargaining** in Indian Criminal Justice System.
- Section 265A to 265L, Chapter XXIA of the CrPC deals with the concept of Plea Bargaining.
- It **was introduced in 2006 as a part of a set of amendments to the CrPC**. It was inserted into the Criminal Law (Amendment) Act, 2005.
- The **process can be initiated only by the accused**. It allows plea bargaining for cases -

- Where the maximum punishment is imprisonment for 7 years
- Where the offenses don't affect the socio-economic condition of the country
- When the offenses are not committed against a woman or a child below 14 ~~are excluded~~

Arguments In Favour For Plea Bargaining In India	Arguments Against Plea Bargaining In India
<ul style="list-style-type: none"> • Fast disposal of cases • Recording Less serious offenses on one's record - It allows a person to plead guilty or no contest in exchange for a reduction in the number of charges or the seriousness of the offenses. This results in recording less serious offenses on the official court records of an 	<ul style="list-style-type: none"> • Voluntarily adopted Mechanism which is only entertained when accused opts it willingly. But law is silent on the point that in case, settlement reached is <u>contrary</u> to the purpose of the legal system. • Corruption - The role of victim in this process would attract corruption which is ultimately defeating the purpose which is sought to be achieved by such

<p>accused.</p> <ul style="list-style-type: none"> • A hassle-free approach - It allows a person to plead guilty without hiring a lawyer, thus avoiding the hassles that they face when the case remains pending. • It avoids publicity because the longer the case goes the more publicity the accused gets. 	<p>action.</p> <ul style="list-style-type: none"> • Independent Judicial Authority - The provisions of Plea Bargaining do not provide for an independent judicial authority to evaluate such applications. • Involvement of Police: As India is infamous for the custodial torture, the concept of Plea Bargaining is more likely to aggravate the situation.
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Way Forward

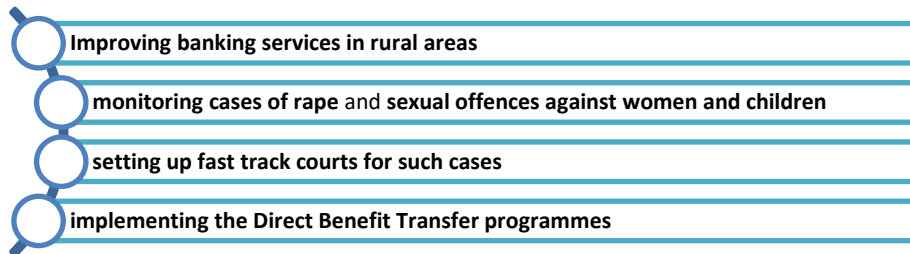
- This is beneficial to the accused and the victim of the crime, **requiring adequate safeguards to prevent potential abuse of the process.**
- It is a **practical vision to overcome overcrowded criminal courts and prisons** and a **potential way to improve litigation efficiency** and rationalize judicial resources, infrastructure and expenses.

Northern Zonal Council Discusses Security, Water Sharing

The **Union Home minister** chaired the 30th meeting of the Northern Zonal Council held in Jaipur, Rajasthan.

What are the Issues discussed in the Meeting?

- A total of **47 issues** were discussed at the meeting of which four were identified as important topics at the national level.



- Union home minister said a committee would be formed under the Union home secretary to formulate a strategy to **fight cyber-attacks.**

About Zonal Council

- The idea of creation of Zonal Councils was mooted by the first PM Nehru in 1956.
- Zonal Councils are the **statutory bodies**, established by an Act of the Parliament i.e. States Reorganisation Act of 1956.
- The **act divided the country into five zones- Northern, Central, Eastern, Western and Southern** and provided a **zonal council for each zone.**
- In addition, a **North-Eastern Council** was created by a separate Act of Parliament i.e. the **North-Eastern Council Act of 1972.**

Organisational Structure of Zonal Council

- **Chairman** - The **Union Home Minister** is the Chairman of each of these Councils.
- **Vice Chairman** - The **Chief Ministers of the States** included in each zone act as Vice-Chairman of the Zonal Council for that zone by rotation, each holding office for a period of one year at a time.
- **Members**- Chief Minister and two other Ministers as nominated by the Governor from each of the States and two members from Union Territories included in the zone.
- **Advisers**- One person nominated by the NITI Aayog for each of the Zonal Councils, Chief Secretaries and another officer/Development Commissioner nominated by each of the States included in the Zone

Functions of Zonal Council: It may discuss, and make recommendations with regard to -

- a. Any matter of common interest in the field of economic and social planning.

- b. Any matter concerning border disputes, linguistic minorities or inter-State transport
- c. Any matter connected with or arising out of the States Reorganisation Act.

Significance of Zonal Councils

- Bringing out **national integration**.
- Arresting the **growth of acute State consciousness**, regionalism, linguism and particularistic tendencies.
- Enabling the **Centre and the States to co-operate** and exchange ideas and experiences.
- **Establishing a climate of co-operation amongst the States** for successful and speedy execution of development projects.
- Being **advisory bodies**, there is full scope for free and frank exchange of views in their meetings.
- They are **regional fora of cooperative endeavour for States** linked with each other economically, politically and culturally.
- They are capable of focusing attention on specific issues taking into account regional factors, while keeping the national perspective in view.

Challenges Faced by Zonal Councils

- The role of zonal councils is **too complicated** due to having the responsibility to maintain peace along with better coordination among all states of India.
- The zonal councils have to **face several issues, when two states have opposite political parties**.

Way Forward

All the **stakeholders should come together** to establish a strong cooperative mechanism for development, for which purpose the regional councils were created. The zonal council should **support the government to develop recommendations for improving public interest**.

Dispute Over Party's Symbol

Following the split led by Eknath Shinde, Uddhav Thackeray's Shiv Sena has urged the Election Commission to hear its side before deciding any claims to the party's bow & arrow symbol.

About Election Symbol

- It is a **standardised symbol allocated to a political party**.
- It is used by the parties during their campaigning and is shown on Electronic Voting Machines (EVMs).
- They were **introduced to facilitate voting by illiterate people**.

Disputes in Election Symbols

- The dispute regarding election symbols erupts **when there is a conflict within a political party which leads to the split of the party**, and both fight for the reserved symbol of the party.
- It was held in **Sadiq Ali and Another v. Election Commission of India**, that symbol is not a property that can **be simply divided between two owners**.
- So, the **dispute regarding electoral symbols is resolved by the EC** of India.
- The Supreme Court decided that the EC is a tribunal and its decision regarding derecognition of a party or allocation of symbols in **case of dispute could be challenged only by appealing to the Supreme Court under Special Leave Petition**.
- But later, it was decided that it can be **challenged in High Courts** too.

Election Commission Dealings Before Symbols Order, 1968

Before 1968, the EC issued notifications and executive orders under the **Conduct of Election Rules, 1961**.

- Rule 5 of Conduct of Election Rules, 1961 specifies that the Commission shall specify the symbols that may be chosen by candidates at elections (in parliamentary or assembly constituencies) and the restrictions to which their choice will be subjected.

Powers of Election Commission on Election Symbol

- The **Election Symbols (Reservation and Allotment) Order, 1968** empowers the EC to recognise political parties and allot symbols.
- **Allocation In Case of Split In Party:** Para 15 of the Symbols Order, 1968, specifies that the Commission has the power to recognise as the party, from splinter groups or rival sections, after taking into account all available facts and circumstances of the case and after hearing all the representatives.
- **Binding Decision:** The decision of the Commission shall be **binding** on all such rival classes/groups.
- **Applicability:** It applies to disputes between recognized national and state parties.
 - ✓ For disputes within **registered but unrecognized parties**, the EC generally advises them to solve their disputes amicably or to approach the court.
- The EC is also the only authority to decide issues on a merger.

How To Resolve Dispute Over party Symbol

- The EC will hear all available facts and circumstances of the case, and decide whether both the factions have sufficient support to proceed with the proceedings. **If sufficient support does not exist it will dismiss the petition.**
- **Strength of Elected Members:** Whenever the EC cannot test the strength of rival groups based on support within the party organisation, it may fall back on testing majority only among elected MPs and MLAs.
- **For immediate electoral purposes, the EC may freeze the party symbol** and advise factions to contest elections with different names and temporary symbols.
- **EC may ask the splinter group of the party to register itself as separate party**, and could lay claim to national or state party status only on the basis of its performance in state or central elections after registration.

Same Symbol For Different Parties

- **Same constituency:** If the candidates of two parties having the same symbol are pitted against each other in the **same constituency** then, as per provisions of Para 12 of the Symbols Order, 1968, "**free symbols**" will be allotted to both the contestants.
- **Intra-state usage:** While national parties are free to use their 'reserved symbol' across India, the recognised state parties can use their symbols in their states. To use the symbol outside their state, they have to seek the EC's permission.
- **Examples:** In the 2015 Bihar Assembly election, Samajwadi Party, Panthers Party, Jharkhand Mukti Morcha and Shiv Sena decided to field their candidates. The EC allowed them to use their symbols **except** when the two parties having the **same symbol** chose to contest from the **same constituency**.

Parties Having Same Symbol

- Federal Party of Manipur and Dravida Munnetra Kazhagam (DMK), Tamil Nadu use 'Rising Sun'
- Bahujan Samaj Party and Asom Gana Parishad have 'Elephant' as their party symbol.
- Samajwadi Party and Jammu and Kashmir Panthers Party contest on 'Cycle' symbol
- Jharkhand Mukti Morcha and Shiv Sena have 'Bow and Arrow'.

Opposition and a Healthy Democracy

- The Chief Justice of India (CJI) stated that **political opposition translating into hostility is not a sign of a healthy democracy.**
- He noted that there used to be mutual respect between the government and the Opposition, but the **opposition space is now diminishing.**

About the Leader of Opposition

- It is the **leader of the largest party in the house**, with at least **one-tenth of the total number of seats.**
- The Salaries and Allowances of Leaders of Opposition in Parliament Act, 1977 define it as a statutory position.
- The **Chairman/Speaker of the House recognizes the Leader of the Opposition Party.**

Significance Of Leader of Opposition in Parliament

- It plays an important role in **bringing cohesiveness and effectiveness** to the opposition's functioning in policy and legislative work.
- It also helps in **bringing neutrality in the appointments** of institutions of accountability and transparency like CVC, CBI, Lokpal, CIC, etc.
- It is **called the Shadow Prime Minister.** The Leader should be ready to take over if the government falls in any adverse circumstance.
- The Public Accounts Committee, whose chairman is invariably from the opposition party, by which **opposition can check the expenditure of the ruling party.**

Problem With the Weak Opposition

- Due to a weak opposition the **opinion and demands of a large population, who did not vote for the ruling party are left without a solution.**
- Weak opposition parties are always **trapped in clustered forms of representation** which then restrict to certain social groups.

Way Forward

- The **court should act as a check on legislative and executive** excess in a modern democracy. This becomes more important when the opposition is not present.
- The opposition parties **need a sustained perennial campaign and mobilization.**
- The institution of **shadow cabinet can be formed** in India to strengthen the role of the opposition.

Supreme Court Call for Reform on Bail Law

The Supreme Court underlined that there is a pressing need for reform in the law related to bail and called on the government to consider framing a special legislation on the lines of the law in UK.

- The UK law has provisions for ensuring *legal aid for defendants*. It also recognises a "*general right to be granted bail*." The Act provides specific grounds for rejecting a bail.

Types of Bail in India

- **Regular Bail:** It is generally granted to a person who has been arrested or is in police custody.
- **Interim Bail:** This type of bail is granted for a short period of time and it is granted before the hearing for the grant of regular bail or anticipatory bail.

- **Anticipatory Bail:** It is granted either by session court or High Court. An application for the grant of anticipatory bail can be filed by the person who discerns that he may be arrested by the police for a non-bailable offence.

Constitution Protection Against Indiscriminate Arrest

- **Article 20** – It deals with the protection of citizens in respect of conviction for offences.
- **Article 21** - It states that no person shall be deprived of his life and personal liberty by the State except as per the procedure established by law.
- **Article 22** – It deals with the protection against arrest and detention in certain cases.

Bail Law in India

- The CrPC does not define the word bail but only categories offences under the IPC as bailable and non-bailable.
- The CrPC empowers magistrates to grant bail for bailable offences as a matter of right.
- In case of non-bailable offences, a magistrate would determine if the accused is fit to be released on bail.
- **The CrPC also lists provisions for the cancellation of bail.**
- The concept of **bail emerges to secure personal liberty protected under Article 21 of the constitution**, of the person charged with some offense.

General Principle Regarding Bail Law

- Grant of bail in the cases of bailable offences is a right that should be guaranteed to the accused by the magistrate or police.
- Grant of bail in non-bailable offences is a judicial discretion given to the magistrate and no power is given to the police in these kinds of cases.
- The accused who has committed the offence which is punishable by death or imprisonment for life, the magistrate has no right to grant bail in those circumstances. But women, a person sick or infirm and children below the age of 16 are excused from the rule.
- The judicial discretion in the cases of bail the appellate court has the massive authority.

Problem In The Indian Bail Law

- **In cases involving high-profile individuals, bail is granted without considering the enormity of the case.**
- Another major problem in the bail system is **the amount of bail bonds set by the court**, which at times poor person can't afford.
- The Supreme Court observed that **unwarranted arrests** are carried out in violation of Section 41 (CrPC), which empowers police to arrest without a warrant.

Latest SC Guidelines With Respect To Bail

- **Specific legislation:** Court pointed out that the Government of India may consider the introduction of a separate enactment, in the nature of a **Bail Act** (as in **United Kingdom**) so as to streamline the grant of bails.
- **Bail application:** The court held that there *need not* be any insistence on a bail application while considering the application under certain Sections of the Code.
 - These sections relate to **various stages of a trial** where a magistrate can decide on release of an accused.
 - The Supreme Court held that in these circumstances, **magistrates must routinely consider granting bail**, without insisting on a separate bail application.

- **Adhering to Timeline:** The Court clearly directed that bail applications ought to be disposed of **within a period of two weeks** except if the provisions mandate otherwise.
 - The Court also held that “applications for **anticipatory bail** are expected to be disposed of **within a period of six weeks** with the exception of any intervening application.
- **Compliance with earlier order:** The Court said that there needs to be a strict compliance of the mandate laid out in **Siddharth vs State of U.P. 2021** judgment.
 - The Court further stated that in case the investigating officer believes that the accused will not abscond or disobey the summons, then until and unless he has been charged for a heinous crime, the officer is not compelled to arrest him during the investigation.
- **Directions to High Courts:** The High Courts have been directed by the apex court to identify undertrial prisoners who cannot comply with bail conditions and take appropriate action in light of Section 440 of the CrPC, facilitating their release.
 - **About Section 440 CrPC:** The amount of bond shall not be excessive, and high courts & sessions courts may reduce the amount prescribed by the magistrate or a police officer.
 - A **similar exercise** has been mandated under **Section 436A** of CrPC, under which a person imprisoned during investigation or trial shall be released on bail on completion of half of the jail term prescribed for that offence.
- **Direction to states:** The SC also directed all state governments and UTs to facilitate **standing orders** to comply with the orders and avoid indiscriminate arrests.
 - The High Court in consultation with the State governments will have to undertake an exercise on the **need for special courts** and vacancies in the position of **Presiding Officers** of the special courts will have to be filled up expeditiously.

Namsai Declaration

- **Assam and Arunachal Pradesh governments** signed the Namsai Declaration to end **inter-state border conflict** by this year.
- Both states decided to restrict the number of disputed villages to 86 instead of 123.
- Now the declaration determines that out of the total 123 disputed villages, **about 34 are actually within the constitutional limits of Arunachal Pradesh. 3 villages are within Assam.**

Background of Dispute

- The states of Assam and Arunachal share an 804.1 km long border.
- The grievance of Arunachal Pradesh, which was made a union territory in 1972, is that many forest areas in the plains that traditionally belonged to hill tribal chiefs and communities were unilaterally transferred to Assam.
- After Arunachal Pradesh got statehood in 1987, a tripartite committee was appointed which recommended that some areas be transferred from Assam to Arunachal.
- Assam opposed this and the matter is in the Supreme Court.

Right to Health

There was an intense discussion on a Private Member's Right to Health Bill in Rajya Sabha.

About Right To Health

- It is an **inclusive right**, extending not only to timely and appropriate health care, but also to the underlying determinants of health.
- It includes the access to safe and potable water and adequate sanitation, healthy occupational and environmental conditions, and access to health-related education and information, including on sexual and reproductive health.

Related Provisions In India

Fundamental Rights

- Article 21 of the Constitution of India guarantees a fundamental right to life & personal liberty

DPSP

- Articles 38, 39, 42, 43, & 47 put the obligation on the state to ensure the effective realization of the right to health.

Article 25 of UNDHR

- India is a signatory of the Article 25 of Universal Declaration of Human Right (1948) by UN, that grants the right to a standard of living adequate for the health.

Challenges In Health Sector

- **Insufficient Medical personnel** - There is a massive shortage of medical staff, infrastructure and last mile connectivity in rural areas. Doctor: Population 1:1800 and 78% doctors cater to urban India (population of 30%).
- **Health budget** - Expenditure on public health funding has been consistently low in India, i.e. approximately 1.3% of GDP.
- **Strong role of Private players** - over 70% of the healthcare services in India are provided by private players. If private healthcare crumbles due to economic constraints or other factors, India's entire healthcare system can crumble.
- **High Out of pocket expenditure** - According to the latest National Health Accounts (NHA) estimates released in March 2021, patients bear a big chunk of health expenses, as high as 61% of the total health expenditure, by themselves.

Way Forward

- Public funding on health should be increased to at least 2.5% of GDP as envisaged in the National Health Policy 2017.
- A comprehensive public health law involving the right to health could be passed by Parliament.
- Health should be transferred to the Concurrent List of the Seventh Schedule under the Constitution. Presently, 'Health' is under the state list.

SC To Examine Steps Taken By States To Curb Hate Speech

The Supreme Court asked the Centre government to inform within six weeks about the preventive, corrective and remedial measures taken so far by the state governments, in compliance with its earlier rulings on hate speech.

{For details on Hate Speech, please refer The Recitals – May 2022}

INTERNATIONAL AFFAIRS

First Russian Train Carrying India-Bound Cargo Via INSTC Arrives In Iran

- An India-bound Russian cargo, sent by train for the **first time using the ambitious International North-South Transport Corridor (INSTC)**, has reached Iran after travelling around 3,800 km through Kazakhstan and Turkmenistan.
- From Iran, the cargo will be shipped to India by sea.
- Turkmenistan currently is not a formal member but is likely to have road connectivity to the corridor

International North-South Transport Corridor (INSTC)

- It is a 7,200-km-long multi-mode transport project for moving freight among **India, Iran, Afghanistan, Armenia, Azerbaijan, Russia, Central Asia** and **Europe**.
- Objective: To facilitate transportation between the member countries.

Historical Background

- The foundation of the North-South transport corridor was laid in September, 2000 in accordance with an intergovernmental agreement signed between **Russia, Iran, and India** in Saint Petersburg (Russia).
- This agreement has been ratified by 13 countries in total. These countries are:
 - ✓ Azerbaijan, Belarus, Armenia, India, Iran, Kazakhstan, Kyrgyzstan, Oman, Russia, Tajikistan, Turkey, Ukraine, Syria.
 - ✓ Bulgaria is the Observer State
 - ✓ Baltic countries like Latvia and Estonia have also expressed willingness to join INSTC.



Components & Funding

- The project has a number of components –

Northern and Western Europe

Russian Federation, Caucasus

Persian Gulf (Western route)

Central Asia – Persian Gulf (Eastern route)

Caspian Sea – Iran Persian Gulf (Central route)

- While India has backed the development of the port, free trade zone and railway line at **Chabahar**, Azerbaijan has come to Iran's aid to expedite the completion of the Iranian section of the corridor.
- Moreover, multilateral organisations are stepping in to support the INSTC in different ways.

Potential Benefits of INSTC

- **Response to Chinese BRI:** The INSTC is seen as a response to China's Belt and Road Initiative.
- **Increased Connectivity & Trade:** The goods sent from Russia to India will take less than 25 days to reach. Earlier it used to take 40 days for the arrival of goods between India and Russia.
 - ✓ The route will also reduce the cost of trade between India and Russia by about 30%.
- **Potential to Supplement India's Act East Policy:** From India, if this corridor were linked with South East Asian Countries, its potential would increase manifold and will further supplement India's Act East policy.
- **Help Overcome Geo-Political Challenges:** It is an easiest option among the current geo-political challenges.

- ✓ It would help India to bypass Pakistan and yet reach out to Central Asia and Russia.
- **Potential To Promote Regional Cooperation And Economic Integration** of the countries in Eurasian region with Indian ocean and Persian Gulf.
 - ✓ Already **existing rail route between Turkey – Iran** can help Indian goods to reach Turkey and beyond.

Challenges

- **Lack of full-fledged Private sector participation** from the time of its very conceptualisation.
 - ✓ The sanctions did play a role in preventing some Western multilateral companies from entering the Iranian market.
- **Lack of application of digital technologies:** Private sector shows lackluster attitude when it comes to participating in developing the corridor, and the accompanying lack in the application of digital technologies.
- **Limitations in structural design:** The present design of the INSTC is limited in terms of territorial reach and scope of scaling up businesses.
- Furthermore, there is no joint work-plan/strategic roadmap for developing the corridor and its surrounding business ecosystem.

Conclusion

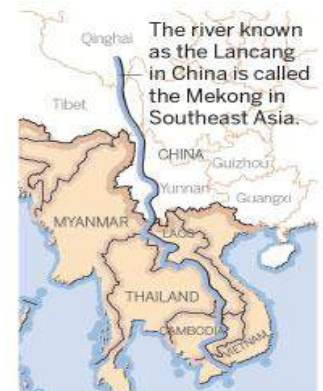
- Compared to China’s Belt and Road Initiative (BRI), INSTC is still in its nascent stages of operationalization. Nevertheless, it offers a geostrategic counter to the sprawling network of the ‘New Silk Road’.
- It also assumes special significance:
 - ✓ for India in terms of exploring diversification of energy import destinations;
 - ✓ for Iran as the main transit hub on the North-South and East-West corridors;
 - ✓ for Russia taking the lead in Eurasian trade and connectivity.

Myanmar Hosts Regional Meeting

- Myanmar’s military government hosted the 7th Lancang-Mekong Cooperation (LMC) meeting. This was the **first high-level regional meeting hosted by Myanmar since the Army took power in a military coup of February 2021.**
- The meeting held under the **theme “Solidarity for Peace and Prosperity”** in the central city of Bagan (Myanmar), a UNESCO World Heritage site.
- At the meeting, China proposed six programs which will benefit the member countries. This includes cooperation plans in agriculture, water resources, digital economy, aerospace, education, and public health.

About Lancang-Mekong Cooperation (LMC)

- It is a multilateral platform established in 2016 for cooperation between the riparian states of the Lancang River and Mekong River.
- **Participants** – China, Cambodia, Laos, Myanmar, Vietnam and Thailand.
 - ✓ The Lancang is the part of the Mekong that flows through China.
 - ✓ Cambodia, Laos, Myanmar, Vietnam and Thailand are five downstream countries of the Mekong River.
- It is a **China-led initiative** which aims to **manage water flow from Chinese hydropower dams** with the other riparian states.
 - ✓ This region is a potential source of regional tensions due to an increasing number of hydroelectric projects.



- ✓ These projects are altering the flow and raising concerns of ecological damage.
- ✓ China has built 10 dams along the upper stretch of the Mekong, the part it calls the Lancang.
- ✓ This has been criticized as these projects affect water levels and downstream fisheries that are important to several Southeast Asian nations' economies.

Ranil Wickremesinghe Elected President Of Crisis-Hit Sri Lanka

- Six-time Prime Minister & *Acting President* Ranil Wickremesinghe has been elected as President of Sri Lanka.
- He won 134 votes in the 225-member parliament. His victory means he will serve out the rest of the presidential term until November 2024.

Why The Present Presidential Election Was Conducted

- In 2019 Sri Lankan Presidential election, Gotabaya Rajapaksa was elected as President.
- Later, the newly-elected President Gotabaya Rajapaksa named his brother, Mahinda Rajapaksa (a two-term president himself), as prime minister.
 - ✓ Mahinda Rajapaksa had resigned in May 2022 amid mass protests at the government's handling of a deepening economic crisis.
 - ✓ Following his resignation, Ranil Wickremesinghe was appointed as PM by Gotabaya.
- The unprecedented economic crisis in the country and subsequent widespread protests had also forced the President Gotabaya Rajapaksa to resign. He left the country in disgrace, after thousands of protesters stormed his official residence.
- The current election was held to find the successor of Gotabaya Rajapaksa.

Presidential Election In Sri Lanka

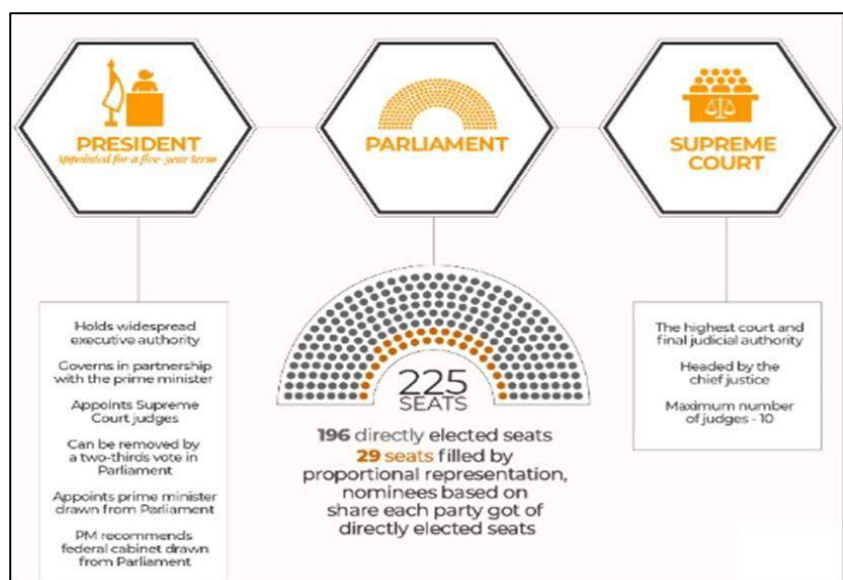
- As President Gotabaya tendered his resignation to the Speaker of Sri Lankan Parliament, the office of President became vacant.
- The procedure in such scenario is governed by the *Constitution of Sri Lanka* and the *Presidential Elections (Special Provisions) 1981 Act*.

Government Structure

- Similar to French model, Sri Lanka follows the semi-presidential system wherein both the PM and President enjoy executive power.
- Though the President of Sri Lanka is directly elected at the end of the term of five years, the process is different when a vacancy arises.

Electing A President When The Office Of President Is Vacant

- Before the succeeding President occupies office, the constitution mandates that the sitting PM (or Speaker of Parliament if the office of PM is vacant) shall become the acting President.
- New President shall be elected by the Parliament and voting for this will be conducted using a secret ballot.



- ✓ Member of Parliament can also give their second and third preferences in their ballot paper.
- If a candidate receives more than one-half of the valid votes cast, such candidate will be declared president.
- The new President, thus elected, shall occupy office only upto the unexpired term of the resigned President.

Background of Economic Crisis in Sri Lanka

- Sri Lanka is facing the double whammy of rising prices and high debt, and its people are bearing the brunt of it as the domestic situation turns increasingly grim.
- In September 2021, Sri Lanka declared a state of **Economic Emergency** for the Supply of Essential Foods.
 - ✓ It allowed the government to take control of the supply of basic food items, and set prices to control rising inflation, which spiked to 14.2% in January.
- The country is struggling under a severe foreign exchange shortage that has limited essential imports of fuel, food and medicine. As a result, Sri Lanka has plunged into the worst economic crisis since independence in 1948.

Factors Responsible for Economic Crisis of Sri Lanka

Covid 19 Pandemic	<ul style="list-style-type: none"> • Tourism industry which represents over 10% of the country's GDP and brings foreign exchange reserve was severely hit • It also led to production shortages and logistical bottlenecks.
Increase in foreign exchange rate	<ul style="list-style-type: none"> • With the supply of foreign exchange drying up, the value of the Sri Lankan rupee started depreciating which made the imports costlier • The island nation imports a large part of its food supplies. So, the price of food items has risen in tandem with the depreciating rupee.
Push for Organic Agri-Products	<ul style="list-style-type: none"> • Sri Lanka wants to become the first country in the world with an agriculture sector that is 100% organic. Govt has banned the use of chemical fertilisers in farming. This has further aggravated the crisis by dampening agricultural production.
Role of Speculators	<ul style="list-style-type: none"> • Speculators are causing rise in food prices by hoarding essential supplies.

Support Extended By India

- As first responder, India's recent economic aid stands at USD 3.5 billion.
- India sent a shipment of 11000 MT of rice ahead of the New Year celebration by the people of Sri Lanka.
- In March 2022 India extended a \$1 billion credit facility to Sri Lanka, which will ensure that the government can procure food, medicines, and other essential commodities.
- This was following a previous \$500 million line of credit in February 2022 to help it purchase petroleum products. In addition to this, India has already supplied 270000 MT fuel to Sri Lanka.
- In November 2021, India had given 100 tonnes of nano nitrogen liquid fertilizers to Sri Lanka.
- RBI has extended a currency swap of \$400 million and deferred payments owed by the central bank of Sri Lanka worth several hundred million dollars.

India's Response On Current Development

- **India Treading With Caution:** India has decided to monitor how the current Lankan political and military leadership handles the crisis.
- **Trade Transactions With Lanka To Be Settled Outside ACU**
 - ✓ RBI has announced that all eligible current account transactions including trade transactions with Sri

Lanka may be settled in any permitted currency outside the Asian Clearing Union (ACU) mechanism.

- Earlier in May 2022, RBI allowed trade with Sri Lanka to be settled in rupees outside the ACU mechanism.
- ✓ It will help Sri Lanka in saving its depleting foreign exchange reserves which stood at a mere \$1.89 billion at the end of May 2022.

{For more about recent Constitutional Amendments In Sri Lanka refer The Recitals - June 2022}

India, Australia Brings Critical Minerals Into Strategic Ties

- India and Australia are expanding their strategic ties to critical minerals in a bid to create a bulwark against China's dominance over raw materials.
- An MoU has been signed to establish **India-Australia Critical Minerals Investment Partnership**.
 - The MoU envisages **\$6 million as initial funding**, to be shared equally by both countries, towards a shared ambition to develop secure, robust and commercially viable critical minerals supply chains.
 - The partnership envisages joint investment for viable lithium and cobalt projects in Australia. This is critical for India's transition towards clean energy ambitions.
- Before the Russian military invasion of Ukraine, eastern Ukraine (Donbas) was expected to emerge as a major source of lithium in the world market.
- Russian control of the Donbas region - Donetsk & Luhansk - has forced emerging electric vehicle makers to look for lithium elsewhere, like in Australia.

Critical Minerals

- ◇ India's Department of Science and Technology, in collaboration with Council on Energy, Environment and Water, drafted the **Critical Minerals Strategy** for India in 2016, with a focus on India's resource requirements till 2030. It has identified 49 minerals that will be vital for India's future economic growth.
 - Based on individual needs and strategic considerations, different countries create their own lists
 - However, such lists mostly include **graphite, lithium and cobalt**, which are used for making EV batteries; **rare earth** that is used for making magnets and **silicon** which is a key mineral for making computer chips and solar panels.

CAATSA Sanctions Waiver To India

- US House of Representatives approved legislation recommending an **India-specific waiver** for the **Countering America's Adversaries Through Sanctions Act (CAATSA)**.
- The amendment urges the Biden administration to use its authority to provide India with a CAATSA waiver to help deter aggressors like China.
- The President does not need legislative approval for a waiver. He has the executive authority to do so. However, Congressional support helps in keeping with the spirit of one president who once sought legislative cover for action.

Countering America's Adversaries Through Sanctions Act (CAATSA)

- In August 2017, President Donald Trump signed into law **which specifically targets Russia, Iran, and North Korea**, known as CAATSA.
- Title II of the Act primarily deals with sanctions on Russian interests such as its **oil and gas industry, defence and security sector, and financial institutions**, in the backdrop of its military intervention in Ukraine and its alleged meddling in the 2016 US Presidential elections.
- The act empowers the US President to impose at least five of 12 listed sanctions on persons engaged in a "**significant transaction**" with the Russian defence and intelligence sectors.
- Basically, this law was meant to punish countries having deep engagements with Russia, North Korea, and Iran using economic sanctions.



Waivers Under CAATSA

- The act said countries having a “**significant transaction**” with Russian intelligence and military agents will be subject to at least five kinds of sanctions.
- Hence, ordinary transactions will not invite sanctions and the imposition of sanctions comes down to the interpretation of significant transaction. **This leaves the scope of waiver.**
- Other exemptions mentioned include the transaction not affecting US strategic interests, not endangering the alliances it is a part of, etc.

CAATSA and India

- In 2018, India purchased S-400 missile system from Russia and in November 2021 the delivery of this missile system began.
 - ✓ India had signed a \$5 billion deal with Russia to buy **five units** of S-400 defence missile systems.
- In July 2018, the US communicated that it was ready to grant India (along with Indonesia and Vietnam) a waiver on the CAATSA sanctions.
 - ✓ Moments after India and Russia signed the deal, the US embassy in India said that the US sanctions were aimed to punish Russia, not to damage military capabilities of 'our allies'.
- However, off late, US seems to have changed its stand as Washington told India it was unlikely to get a waiver from CAATSA.
 - ✓ Last year, US sanctions were imposed on Turkey and China over the procurement of S-400 missile systems. Hence, there were renewed apprehensions that US may impose similar punitive measures on India.
- So far, **US had never categorically stated whether CAATSA would apply to India.**
 - ✓ Also, citing the strategic defence partnership between the two countries, India was confident of getting a waiver from CAATSA.

S-400 Triumph

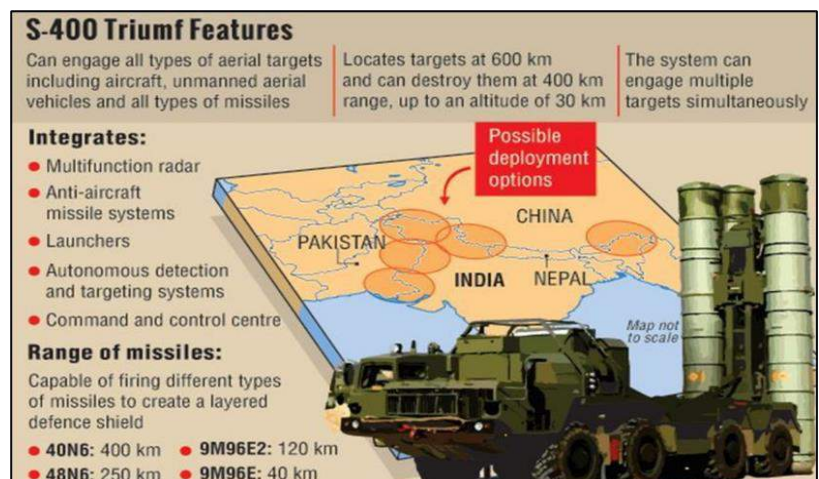
- Russian-built S-400 Triumph is the world’s most dangerous operationally deployed modern long-range surface-to-air missile system.
 - ✓ A missile defence system is intended to act as a shield against incoming ballistic missiles.
- It is considered much more effective than the Terminal High Altitude Area Defence (THAAD) system developed by US.
- S-400 was made operational in 2007, and is responsible for defending Moscow. It was deployed in Syria in 2015 to guard Russian and Syrian naval and air assets.

Features

- It can be deployed within five minutes, and is capable of firing **4 types** of missiles to create a layered defence.
- It can simultaneously track 100 airborne targets, including super fighters such as the US-built F-35, and engage six of them at the same time.

Why India Need This

- India must have the capability to thwart missile attacks from the two



likeliest quarters, Pakistan and China.

- Beijing signed a deal with Moscow in 2015 to buy six battalions of the S-400 system, and deliveries began in January 2018.
- While the Chinese acquisition has been seen as a “gamechanger” in the region, the concern for India is limited because of the system’s range.
- However, the S-400 can play a crucial role in case of a two-front war.
- While the 36 Rafales armed with Meteor and Scalp missiles being inducted by IAF are primarily meant for an offensive role, the S-400 systems are defensive in nature.

Imports from Russia Increased

- Driven by a sharp spike in crude oil shipments, India’s imports from Russia have shot up 3.7 times to top \$5 billion during April and May 2022.
- Since February, when Russia attacked Ukraine, imports have risen close to 3.5 times to \$8.6 billion, compared to \$2.5 billion in the corresponding period in 2021.
- Apart from petroleum, some other product categories, such as fertiliser and edible oil, have also seen a significant rise.
- The numbers indicate that since March 2022, the government has not been shy of allowing imports from Russia despite international pressure.
- The decision to import from Russia is mainly driven by **India’s own national interests** as the sanctions by the West have helped India get a better deal from Russian companies.



India’s Push To Boost Africa Ties

- According to the data released by the government, 222 lines of credit (LoCs) worth \$14.07 billion covering as many as 357 projects have been extended to 42 countries in Africa.
- These projects are spread across sectors like roads, railways, power, ports and shipping, telecom, health, education and aviation.
- India has so far completed 197 projects in Africa, 65 more are currently being implemented and 81 are at the pre-execution stage.
- African continent plays a particularly important role in India’s foreign policy outlook and that this is reflected in India’s expanding diplomatic footprint that now covers 43 African countries.
- This highlights the fact that development assistance continues to play an important role in India’s engagement with Africa.

SUMMITS AND ORGANISATIONS

G20 Foreign Ministers' Summit

- G20 foreign ministers' summit was held at Bali, Indonesia - the current President of G20.
- It was held under the **theme** - *Building a more peaceful, stable, and prosperous world together*.
- It ended with no joint statement, and no announcements of any agreements being reached.
- India was represented by the EAM, Dr. S. Jaishankar.

India & G20

- **India is a troika member** - India is a G20 troika member. Troika of G20 consists of the current (Indonesia), previous (Italy) and incoming (India) G20 Presidencies.
 - ✓ India will assume the G20 Presidency on 1st December 2022 from Indonesia. It will convene the G20 Leaders' Summit for the first time in India in 2023.
- **New Sherpa Nominated**
 - ✓ Former NITI Aayog CEO Amitabh Kant has been picked as India's new Sherpa for G-20.
 - A sherpa is the personal representative of a head of state or head of government.
 - Sherpa engages in planning, negotiation & implementation tasks through the Summit.
 - Sherpas meet much before the start of Summit to iron out differences on various issues.
 - ✓ He replaced Piyush Goyal, Minister for Commerce & Industry and Consumer Affairs, who was appointed as the G-20 Sherpa in September 2021.

About G 20

- G-20, is a group of finance ministers and central bank governors from 19 individual countries and EU. It was established in 1999.
- G20 was elevated to a forum of Heads of State/Government in 2008 to effectively respond to the global financial crisis of 2008.
- G-20 is a forum, not a legislative body, its agreements and decisions have no legal impact, but they do influence countries' policies and global cooperation.

Significance

- **Carries Significant Weight:** G20 members represent around 85% of global GDP, over 75% of global trade, and 2/3rd of the world's population.
- **Promotes Multilateralism:** The practice of rotating the chair gives all the members a chance to shape the global agenda.
- **A Number Of Overarching Themes:** It has gradually broadened its focus to areas like *counterterrorism, Climate change, North Korea and Iran*.
 - ✓ 2021 summit endorsed the Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of Economy.
- **United Fight Against COVID-19:** In March 2020, G20 leaders pledged to inject \$5 trillion into the global economy to reduce the economic impact of pandemic.
 - ✓ G20 members have also agreed to contribute to WHO's COVID-19 Solidarity Response Fund on voluntary basis.



Maoist Violence Down 77% Since 2009

According to the data provided by the Ministry of Home Affairs in Lok Sabha, Left Wing Extremism (LWE) violence has decreased from 2258 in 2009 to 509 in 2021.

Key Highlights

- **Resultant deaths** (civilians & security forces) due to LWE violence have reduced to 147 in 2021.
- **Stat-wise and year-wise data** on death of **security forces** between 2019- 2022 shows that the LWE problem continues to rage in Chhattisgarh.
 - ✓ In 2021, Chhattisgarh accounted for 90% (45 out of 50) of all security personnel deaths in the country.
 - ✓ Jharkhand is the only state that recorded security personnel deaths (5) after Chhattisgarh in 2021.
- **Geographical Spread** of the LWE violence has reduced as only 46 districts reported LWE related violence in 2021 as compared to 96 districts in 2010. Decline in geographical spread is also reflected in reduced number of districts covered under Security Related Expenditure (SRE) scheme.
 - ✓ The number of SRE districts was also reduced from 126 to 90 in April 2018 and further to 70 in July 2021.
- **Most LWE Affected Districts** – defined as districts contributing approximately 90% of LWE violence – came down to 30 from 35 in 2018 and further to 25 in 2021.



India To Set Up Joint Theatre Commands Of Tri-Services

Defence Minister Rajnath Singh has said that a joint theatre command of tri-services would be set up to enhance coordination among armed forces.

Theaterisation of Armed Forces

- Theaterisation is a concept which seeks to integrate the capabilities/assets of the three services - army, air force and navy – in order to optimally utilise their resources for wars and operations.
- Theatre commands will have units of the Army, the Navy and the Air Force. All of them will work as a single entity looking after security challenges in a specified geographical territory.
- It will create a military structure in which specific theatre commands/units will be placed under the Theatre Commander.
- The Theatre Commander will be a three-star general, drawn from any of the three services, depending on the function assigned.

Theaterisation Model Under Consideration

It talks about setting up of six theatre commands. These are:

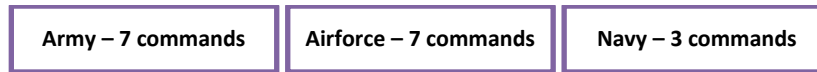
- **Air Defence Theatre Command**
 - ✓ It will control air defence resources of all three services. It will be tasked with protecting military assets from airborne enemies.
 - ✓ It will be headed by a top three-star Indian Air Force officer based in **Prayagraj**.
- **Maritime Theatre Command**
 - ✓ This will be responsible for securing India from seaborne threats.

✓ Headed by a top three-star Indian Navy officer and will be based in **Karwar, Karnataka**.

- **Other Commands - Northern Command** (Comprising Jammu & Kashmir and Ladakh); **Western Command; Eastern Command; Logistics command**.
- The 1st phase involves the creation of Air Defence Command and Maritime Theatre Command.

Present Model In India

- At present, India has 17 single service commands and only two tri-service commands.
- The 17 single service commands are divided as:



- **Two tri-service commands** are: Andaman and Nicobar Command (ANC), and The Strategic Force Command (handles the nuclear weapons).
- Creating Theatres would involve merging existing commands. After restructuring, the ANC command will come under the proposed Maritime Theatre Command and SFC will be under **National Security Council**.

Challenges

1. **Apprehensions of Air force:** It has reservations regarding the asset division. The organization fears that it will lose control over its assets and operations. IAF has also raised apprehension regarding the nomenclature of commands, the leadership of theatre commands and dilution of powers of chiefs.
2. **Apprehensions Raised by MHA:** The Ministry of Home Affairs is worried about the operational command of Central Armed Police Forces (CAPF). It fears that the control of CAPF would go to Ministry of Defence.

Cochin Shipyard Delivers Aircraft Carrier To Navy

- **Indian Navy** took delivery of Indigenous Aircraft Carrier, IAC-1, **nation's 1st indigenously built aircraft carrier** from its manufacturer, Cochin Shipyard Ltd.
- The carrier, after commissioning, will be called 'Vikrant'. It is named after India's first aircraft carrier – INS Vikrant, which was acquired from the UK in 1961, played a stellar role in 1971 War with Pakistan.
- The commissioning of this carrier is likely to take place on Independence Day.

Features

- The 262-metre-long carrier has a full displacement of close to 45,000 tonnes. The ship would be capable of operating an air wing consisting of 30 aircraft.
- The aircraft carrier will be initially with the western naval command. The Western Naval Command is one of the three command-level formations of the Indian Navy. It is headquartered in Mumbai, Maharashtra.

Ship - A Perfect Example Of Collaboration With Private Players

- The aircraft carrier has a large number of indigenous equipment and machinery from major private players such as Kirloskar, Larsen & Toubro, etc.
- Over 100 MSMEs were also involved in the production of this ship.
- The indigenisation effort has led to the development of ancillary industries besides the generation of employment opportunities.

Significance of IAC for India

A. Enable Transition from Brown Water Navy to Blue Water Navy to carry out air operations

- ✓ A blue water navy is a navy that has capacity to project a nation's strength and power across high seas.
- ✓ A brown water navy is capable of military operations in littoral zone waters.

B. Strategic Significance making India a significant maritime power

- ✓ India's area of responsibility ranges from the east coast of Africa to the Western Pacific.
- ✓ High percentage of India's trade passing through the South China Sea.
- ✓ Also, India is a dominant force in Indo-Pacific region.
- ✓ To counter China in the region more effectively as China has two operational aircraft carriers and the third one was launched recently in June 2022.

C. India Joined Elite Club: So far, only 5 or 6 nations have the capability of manufacturing an aircraft carrier.

D. Aatma Nirbhar Bharat: With an overall indigenous content of 76%, the aircraft carrier is a perfect example of the quest for Aatma Nirbhar Bharat.

India's Earlier Aircraft Carriers

INS Vikramaditya	• Navy's only aircraft carrier <i>in service currently</i> (Russian built, commissioned in 2013)
INS Vikrant	• It was British-built HMS Hercules; Commissioned in Indian Navy in 1961.
INS Viraat	• It was British-built HMS Hermes; Commissioned in Indian Navy in 1987

Operation NARCOS

- Railway Protection Force (RPF) had launched **Operation "NARCOS"** – a drive against smuggling of narcotics through rail. RPF has been empowered to conduct search, seizure & arrest under Narcotic Drugs & Psychotropic Substances (NDPS) Act since April 2019.
- Recent initiatives of RPF include:
 - ✓ **Operation AAHT** – to rescue victims especially women and children, from traffickers.
 - ✓ **Operation Yatri Surakhsha** – RPF supports state police to fight against passenger crime.
 - ✓ **Meri Saheli Initiative** – To focus on safety of women passengers.
 - ✓ **Operation Nanhe Farishte** - To save children who are abandoned and found alone at railway stations.

UNSG's Report On Children And Armed Conflict

The report highlighted that in 2021, children in armed conflict suffered a **high number of grave violations**.

India Specific Observation

- The report mentions the situation in India under the category "Situations not on the agenda of the Security Council or other situations".
- The report welcomed the legal and administrative framework for the protection of children and improved access to child protection services in several Indian states/UTs, including Assam and Jammu and Kashmir.
- But it expressed concern about the risk of child recruitment by armed groups in affected districts. It also expressed concern on increased number of violations against children verified in J&K.
- It also mentions that total of 33 boys were detained by Indian security forces in Jammu and Kashmir for their alleged association with armed groups or on national security grounds.

India's Response

India was not happy with its inclusion in the report. India said that attempts to selectively expand the mandate will only politicise its agenda.

GEOGRAPHY AND ENVIRONMENT

Oceans Great Dying 2.0

Scientists warn of imminent mass annihilation of marine species similar to the Permian extinction (~250 million years ago) that wiped out most lives in oceans.

What Led To Extinction Before

- Towards the end of era, a series of **volcanic eruptions occurred** in central Siberia, **injecting massive amounts of greenhouse gases (GHG)** into the atmosphere. Then, as now, the uncontrolled **GHG emissions triggered climatic changes**.
- **Low oxygen and warm conditions** drove the extinction of marine organisms 250 million years ago.

Why It Is A Concerning Issue Today?

- **Deep oceans are warming up.** Ocean heat content reached a record high in 2021.
- **Unpredictable Impacts:** The **exact number of species inhabiting the ocean world is not known** yet; 91% of the species are yet to be described or classified.
- If emissions continue to climb and temperatures reach around 4.9 degrees Celsius by the end of this century, close to about 40% of marine genera could perish by 2300.

Permian Extinction

- **Also known as Great Dying**, was caused by global warming that left ocean animals unable to breathe.
- **Roughly 96% of marine species and 70% of land species went extinct.**
- Permian Era is a period when land masses collided to form the supercontinent Pangaea.
- The supercontinent was arid. Only a few parts received rainfall round the year.

Heat Wave

- It is a **period of abnormally high temperatures**, more than the *normal* maximum temperature that occurs during the summer season.
- According to Indian Meteorological Department (IMD) heat wave need not be considered till maximum temperature of a station reaches at least **40°C for Plains and at least 30°C for Hilly regions**.

Effects of Heat Wave

- **Increased Energy Consumption** - Demand for air conditioning can overload systems, which can lead to power outages and blackouts.
- **Elevated GHG Emissions and Air Pollution** since power plants rely on fossil fuel for energy production.
- **Poses Danger to Aquatic Systems** - The surface temperatures can heat storm-water runoff into drainage systems and raises water temperatures as it is discharged into ponds, streams, rivers, lakes and oceans, resulting in thermal pollution.
- **Discomfort and Danger to Human Health** – It seriously affect the health of sensitive and vulnerable populations such as older adults, children, and those with weather-responsive health conditions.
- **Impacts on Animals** - Most species need optimum temperatures to colonize, utilize and thrive in their ecosystems and due to high temperature, essential activities of the organisms gets limited.
- **Food security** - Adverse heat can also significantly reduce the availability of food, shelter, water.

Reasons Why India Is Experiencing More Heat Waves?

- Magnified effect of paved and **concrete surfaces** and **lack of tree cover** in **urban areas**.
- **Urban heat island effects can cause ambient temperatures to feel 3 to 4 degrees higher than they are.**
- Global temperatures increased by an average of 0.8 degrees over the past 100 years. **Night temperatures are also rising.**
- **Higher daily peak temperatures** along with longer, more intense heat waves globally due to climate change.
- **High intensity of UV rays** in medium-high heat wave areas.

Steps Taken To Deal With Heat Wave

- Chhattisgarh, Odisha, Kerala, Rajasthan, Andhra Pradesh, Maharashtra and Karnataka had **declared heat waves as a local disaster.**
- **Water kiosks, staggered outdoor work hours, cool roofs for buildings and homes.**
- **Passive Cooling technology** is a widely-used strategy to create naturally ventilated buildings.
- **Plantation and effort to increase the area under green cover** are the primary requirement to cut heat load within urban areas.
- Darker colours absorb more heat, so increasing the **reflectivity of buildings can reduce heat.**

National Seismological Network

- It is developed by the Ministry of Earth Sciences.
- The network is capable of recording any earthquake event in India.
- National Centre for Seismology (NCS) maintains the National Seismological Network of more than 150 stations each having state of art equipment.

Harnessing Green Hydrogen: Opportunities for Deep Decarbonization in India

NITI Aayog released a report titled *Harnessing Green Hydrogen: Opportunities for Deep Decarbonization in India.*

Major Highlights of The Report

- The government should focus on enabling a cost reduction pathway for green hydrogen production in India.
- Hydrogen **demand in India could grow more than fourfold by 2050**, representing almost 10% of global demand.
- Decarbonisation: Green hydrogen is crucial for sectors such as fertilizers, refining, methanol, maritime shipping etc.
- In the longer term, steel and heavy-duty trucking are likely to drive the majority of demand growth, accounting for almost 52% of total demand by 2050.
- **Three hydrogen corridors should be developed** across the country based on state grand challenges.
- The governments **can provide grants to projects, support entrepreneurs** through incubators and investor networks, and put in place regulations that manage first-mover risks.
- Promote export of green hydrogen and green hydrogen-embedded products through a **global hydrogen alliance.**
- Make green hydrogen competitive vis-à-vis grey hydrogen
- Encourage market development using the industrial cluster, and viability gap funding.
- Initiate Green Hydrogen standards and a **labelling programme**

About Green Hydrogen

- It is hydrogen that is **produced by splitting water into hydrogen and oxygen using an electrolyser** powered by renewable energy sources such as wind and solar.
- **Certified green hydrogen requires an emission reduction of >60-70%** below the benchmark emissions intensity threshold.

Significance of Green Hydrogen	Challenges with the Green Hydrogen
<ul style="list-style-type: none"> • It can potentially provide a replacement of fossil fuels in industrial processes. • It can help India significantly reduce its dependence on imported fuel. • It can be produced from excess renewable energy and stored in large amounts for a long time. • It can also be used with fuel cells to power anything that uses electricity, such as electric vehicles and electronic devices. • It can be produced wherever there is water and electricity to generate more electricity or heat. 	<ul style="list-style-type: none"> • We need high energy requirement in compressed hydrogen storage, due to low specific gravity. • Only a handful of Indian companies manufacture electrolysers. • According to The Energy and Resources Institute (TERI), the cost of green hydrogen production is \$5-\$6 per kg. At this rate, it is not easy for industries like steel, fertilizer and long-range shipping to adopt this fuel. • Unwillingness of Industries: Industrial sectors such as chemicals, fertilisers, steel and refineries are unlikely to transition to low carbon alternatives because of the higher associated costs

Way forward

- The government **could bring a Production-Linked Incentive (PLI) scheme** for manufacturing electrolysers to bring **down the production cost of green hydrogen**
- To promote clean fuels, India **should consider making it mandatory for fertilizer plants and oil refineries to purchase green hydrogen**.

Other Types Of Hydrogen

Blue hydrogen	It is produced mainly from natural gas , using a process called steam reforming, which brings together <u>natural gas and heated water</u> in the form of steam. The output is hydrogen, but also carbon dioxide as a by-product (most of which is captured and stored) . It is sometimes described as low-carbon hydrogen.
Grey hydrogen	It is created from natural gas, or methane , using steam methane reformation but <i>without capturing the greenhouse gas</i> .
Black and brown hydrogen	It made from fossil fuels like coal , through the process of gasification. No capture of GHG. It is the cheapest form
Pink/ Red/ Purple hydrogen	It is generated through electrolysis powered by nuclear energy .
Yellow hydrogen	It made through electrolysis using solar power .
White hydrogen	It is naturally-occurring geological hydrogen found in underground deposits and created through fracking . There are no strategies to exploit this hydrogen at present.
Turquoise hydrogen	This is a new entry in the hydrogen colour charts and production has yet to be proven at scale. It is made using a process called <u>methane pyrolysis</u> to produce hydrogen and solid

Green Hydrogen Policy/ Green Ammonia Policy

- It aimed at boosting the domestic production of green hydrogen to 5 million Tonnes by 2030 and making India an export hub for the clean fuel.
- It offers 25 years of free power transmission for any new renewable energy plants set up to supply power for green hydrogen production before July 2025.
 - ✓ This means that a green hydrogen producer will be able to set up a solar power plant in Rajasthan to supply renewable energy to a green hydrogen plant in Assam and would not be required to pay any inter-state transmission charges.
 - ✓ Besides, producers will be allowed to set up bunkers near ports for storage of green ammonia for export by shipping.
- The policy also states that energy plants set up to produce green hydrogen/ammonia would be given connectivity to the ISTS (Inter-State Transmission System) on a priority basis.
- Manufacturers of Green hydrogen and ammonia are allowed to purchase renewable power from the power exchange or set up Renewable Energy (RE) capacity themselves or through any other developer, anywhere.
- It provides facility for producers to bank any surplus renewable energy generated with discoms (power distribution companies) for upto 30 days and use it as required

Challenges

- **Monopoly:** Many public sector electricity utilities are unwilling to let go of their monopoly in power distribution.
- **Reluctance of States:** The RE-rich states are either moving away from allowing RE banking or introducing regulations to restrict this facility.
- **Lesser Margins:** The GHP omits to mention any waiver of ISTS losses for green hydrogen and ammonia projects. Also, it provides for discoms to procure and supply RE to makers of green hydrogen/ammonia at the cost of procurement with only a small margin determined by the SERCs. This margin may not be enough incentive for discoms for long-term basis.

Po River

- It is the longest river in Italy, rising in the Monte Viso group of the Cottian Alps on Italy's western frontier. It emptying into the Adriatic Sea.
- It has 141 tributaries, some major tributaries are Pellice, Varaita, Maira, Chisola, Sangone, Dora Riparia, Stura di Lanzo and Malone.

Lake Victoria

- It is the world's largest tropical lake and the second largest freshwater lake.
- Kenya, Tanzania and Uganda share Lake Victoria.
- The only outflow from Lake Victoria is the Nile River, which exits the lake near Jinja, Uganda.
- It touches the Equator on its northern side.

Treeshrew

- Scientists have spotted fossils of a small mammal resembling squirrels called **treeshrew** belonging to a new genus and species from **Jammu and Kashmir**.
- It currently represents **the oldest record of fossil tupaiids** in the Siwaliks, extending their time range by 2.5-4.0 Million Years in the region.
 - ✓ Tupaiids refers to several species of the East Indian and Asian insectivorous family, somewhat resembling squirrels in size and arboreal habits (living in trees).
- Treeshrews are very rare elements of the fossil record, with only a few species known throughout the entire Cenozoic era (66 million years ago until today)

MoEFCC Proposes Amendments In Environment Protection Act, 1986

The Ministry of Environment, Forests and Climate Change (MoEFCC) proposes amendments in **Environment Protection Act (EPA), 1986**, to decriminalize provisions.

Amendments Proposed In The Act

- The ministry **has proposed to replace imprisonment with monetary penalty** for the less severe contraventions under the EPA, which will also be decriminalized.
- Serious violations of EPA which lead to **grievous injury or loss of life shall be covered under the provision of IPC**.
- The amendments also **propose the creation of an “Environmental Protection Fund”** in which the amount of penalty will be remitted.

About Environment Protection Act, 1986

- It was enacted under **Article 253** of the Indian Constitution **to implement the decisions made at the Stockholm Conference 1972**.
 - ✓ **Article 253** empowers the Parliament to make any law for the whole or any part of the territory of India for implementing any treaty, agreement or convention with any other country or countries or any decision made at any international conference, association or other body.
 - ✓ In the Conference it was agreed to take suitable steps for the protection and improvement of the human environment.
- It lays down a system of speedy and adequate response to situations threatening the environment.
- This Act's major **goal is to provide for the conservation and improvement of the environment and all matters related to it**.
- It is an umbrella legislation designed to provide a framework for the coordination of central and state authorities established under the Water Act, 1974 and the Air Act, 1981.

Main Provisions of the Act

- **Powers Of The Central Government** - To establish authorities charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country.
- **Appointment of officers and their powers and functions** - The Central Government may appoint officers with such designations and may entrust to them such of the powers and functions as it may deem fit.
- **Restriction on pollutant discharge** - No individual or organization shall discharge/emit or permit to discharge/emit any environmental pollutant in excess of the prescribed standards.

- **Cognizance of offences** - No court shall take cognizance of any offence except on a complaint made by the Central Government or any authority or officer authorized in this behalf by that Government.
- **Powers of entry and inspection** - Any person empowered by the Central Government shall have the right to enter any place for inspection or compliance with any order, notification and direction given under the Act.
- **Establishment of environmental laboratories** - The Central Government is entitled to establish or recognize any laboratory/institute as environmental laboratories to carry out the functions entrusted to such a laboratory.
- **Penalties for offences** - Non-compliance or Contravention to any of the provisions of the Act is considered as an offence. Any offences under the EPA are punishable with the imprisonment of up to 5 years or a fine up to 1 lakh rupees or both.

Drawbacks of the Act

- **Protection of action taken in good faith** - No suit, prosecution or other legal proceeding shall lie against the Government or any officer or other employee of the Government or any authority constituted under this Act.
- **Complete Centralization** - Wide powers are provided to the center and no power is given to the State Governments. It can be liable to arbitrariness and misuse.
- **Absence of Public Participation** - It also says nothing about public participation as regards environmental protection.

Floating Solar Power

- Recently Prime Minister of India dedicated to the nation the 92-MW floating solar power project set up at the National Thermal Power Corporation's (NTPC) Kayamkulam unit in Kerala
- Ramagundam Floating Solar PV Project is a 100 MW solar power project of NTPC, in Telangana.
- In **Floating solar plants**, solar panels are mounted on a structure that floats on a body of water, typically a reservoir or a lake.

Advantages Of Floating Solar Power

- It doesn't require for any land space as the land resources are rare.
- With the presence of floating solar panels, the evaporation rate from water bodies is reduced, thus helping in water conservation.
- The water body underneath the solar modules helps in maintaining their ambient temperature, thereby improving their efficiency and generation.

Landslide

Recently, various part of India including Manipur, Assam and Mumbai are facing the incidence of landslide.

About Landslide

It is the **movement of a mass of rock, debris**, or earth down a slope under the **direct influence of gravity**. The term-encompasses 5 modes of slope movement: *falls, topples, slides, spreads & flows*.

Cause of Landslide

Natural Causes: Earthquakes, Excessive Rainfall

Anthropogenic Causes

- **Infrastructure Development** -Creation of roads, railways, dams, etc. in the mountainous region.

- **Mining** - Removing the surface of the earth for mineral exploration loosens the grip of material.
- **Deforestation** loosens the soil grip and makes the region more vulnerable to landslides.
- **Unsustainable Tourism** - The rising tourist puts greater pressure on land as more infrastructure and amenities are needed to accommodate them. This leads to more construction and greater landslides.

Landslide Zones In India

- Approximately **15% of the country's territory is prone to landslides**.
- The Himalayas of Northwest and Northeast India, as well as the Western Ghats.

Consequences Of Landslides	Steps Taken In India To Deal With Landslides
<ul style="list-style-type: none"> • It poses repeated threats to human life and livelihood. • It restricts the movement, because mud, rocks, and debris sliding down the hill create a barrier on important traffic corridors such as highways and railway lines. • It damages the infrastructure. • Economic loss because a substantial amount of money is spent on rebuilding infrastructure. • It may jeopardize water availability, because when landslides occur on the slopes of a river valley, the sliding material may reach the valley's bottom. 	<ul style="list-style-type: none"> • National Disaster Management Authority (NDMA) Guidelines on Landslide Hazard Management (2009) - It outlines the steps that should be taken to avoid or reduce the risk of landslides. Identifying regions that are prone to landslides • National Landslide Risk Management Strategy (2019) - It covers <u>all aspects</u> of landslide disaster risk reduction and management, such as hazard mapping, monitoring, and early warning systems. • National Institute of Disaster Management (NIDM) - It is a prominent institute that provides disaster management and disaster risk reduction <u>capacity building support</u> to various national and state level authorities.

Way Forward

- States in high-risk areas, such as Himachal Pradesh and Uttarakhand, should **proceed with discretion while pursuing disruptive projects**.
- Before commencing mining or dam construction, **appropriate environmental impact assessment (EIA) standards should be followed**.
- **Landslide micro zoning methods to be implemented** for hilly & other extremely sensitive areas.
- **More funds should be given to landslide planning and mitigation** agencies to strengthen disaster management capacity.
- **Mitigation techniques such as restricting agriculture to valleys** and places with moderate slopes, promoting large-scale afforestation initiatives should be encouraged.
- We should **install early warning systems** based on the monitoring of ground conditions such as strain in rocks and soils, slope displacement, and groundwater levels.

New Pathway to Regulate Nitrate Absorption in Plants

Researchers led by those from the National Centre of Biological Sciences, Tata Institute of Fundamental Research, Bengaluru (NCBS-TIFR), have found a new pathway that regulates nitrate absorption in plants.

About New Method

- The **micro-RNA, miR444**, activates the target gene MADS27, which increases nitrate absorption, root development and stress tolerance, and thus provides a way to control these plant properties.
- The researchers studied this mechanism in both rice and tobacco plants.

Role of Nitrates in Plants

- Nitrogen is one of the most important macronutrients **needed for development of a plant**.
- It is a **part of chlorophyll**, amino acids and nucleic acids, among others.
- It is **mostly sourced from the soil** where it is mainly absorbed in the form of nitrates and ammonium by the roots.
- It also plays a role in controlling genome-wide gene expression that in turn regulates root system architecture, flowering time, leaf development, etc.

Nitrate Overuse

- The overuse of nitrates in fertilizers can lead to the dumping of nitrates into the soil leading to accumulation of nitrates in water and soil.
- This accumulation adds to soil and water pollution and increases the contribution to greenhouse gases.

Derecho

Some states in **US** were hit by a storm system called **Derecho**.

About Derecho

- It is a **widespread, long-lived, straight-line windstorm**.
- It can be just as **powerful and destructive like hurricane or tornado**.
- It is a **warm-weather phenomenon** and generally occurs during summertime.
- The **sky turns green** during the derecho storm.

Types

- **Progressive:** It is associated with a short line of thunderstorms that may travel for hundreds of miles along a relatively narrow path. It is a summer phenomenon.
- **Serial:** It has an extensive squall line, wide and long, sweeping across a large area. It usually occurs during spring or fall.
- **Hybrid:** It has the features of both progressive and serial derechos.

Why Did The Sky Turn Green?

- Storms contain huge amounts of water and light interacts with them.
- The **big raindrops and hail scatter away all but the blue wavelengths** due to which primarily blue light penetrates below the storm cloud.
- This **blue then combines with the red and yellow** of the afternoon or the evening sun to produce green.

Comparison between derecho and tornado

- A tornado is a cyclonic storm, **the winds of a tornado travel rapidly in a circular or spiral pattern**, while the storm as a whole move **relatively slowly** across the map.
- A **derecho is a straight-line wind**. It is not moving in a circular or spiral pattern, but travels directly, in a more or less straight line at a **very high rate of speed**.
- The **wind speeds of a derecho are similar to a tornado. Both do heavy damage**.

Azores High

A very large Azores High has resulted in unusually dry conditions in the western Mediterranean, including the Iberian Peninsula.

About Azores High

- It is a **subtropical high pressure system** that extends over the eastern subtropical North Atlantic and western Europe during the winter.
- It is **associated with anticyclonic winds in the subtropical North Atlantic.**
- It is **formed by subtropical descent from dry air** and coincides with the lower branch of the Hadley Circulation.
 - ✓ Hadley Cells are the low-latitude overturning circulations that have air rising at the equator and air sinking at roughly 30° latitude. They are responsible for the trade winds in the Tropics and control low-latitude weather patterns.
- The researchers showed that the Azores High expansion is driven by external climate forces and that the **only external forcing** that produces this signal in the **industrial era** is atmospheric greenhouse gas concentrations.

Impact of Azores High

- **An annual drying of 5-10 millimetres per decade has been recorded in the Iberian Peninsula** throughout the second half of the 20th century.
- A further **10-20% drop in winter precipitation is expected by the end of the 21st century.**
- Olive-growing regions in southern Spain will suffer a 30% decline in production by 2100
- Cultivation area in grape-growing regions across the Iberian Peninsula will shrink 25-99% by 2050.

Cloud Burst

Huge tragedy unfolded near the holy Amarnath cave after a cloudburst reportedly triggered flash floods and chaos.

About Cloud Burst

- It is **short-duration, intense rainfall** events **over a small area.**
- The **rainfall rate which is equal to or greater than 100 mm/hour is a cloudburst.**

Occurrence of Cloudburst

- It occurs when **moisture-carrying air** moves up a hilly terrain, forming a vertical column of clouds known as 'cumulonimbus' clouds.
- Such clouds usually cause rain, thunder and lightning. This **upward motion of the clouds is known as an orographic lift.**
- These **unstable clouds cause an intense rainstorm over a small area** after becoming heavy enough and locked in the ridges and valleys between the hills.
- The **energy necessary for the cloudburst comes from the upward motion of air.**
- It mostly occurs at elevations between 1,000-2,500 metres above sea level.
- The moisture is usually provided by a low-pressure system (usually associated with cyclonic storms in the ocean) over the Gangetic plains associated with low level winds flowing in from the east.
- Sometimes **winds flowing in from the north-west also aid the occurrence of cloudbursts.**
- The many factors that have to come together to make a cloudburst event happen make them highly unlikely.

Effect of Cloudbursts

- Cloudbursts are also **responsible for Flash floods creation.**

- **Landslides, Mudflows and Land caving** are also the indirect effect of outburst.

Predication of Cloud Burst

- There is **no satisfactory technique to predict a cloudburst** because of their small scale.
- A very fine network of radars is required in order to detect the likelihood of a cloudburst however this technique is prohibitively expensive.
- Only the areas likely to receive heavy rainfall can be identified on short-range scale.

Flash Floods

- It is **highly localized events of short duration with a very high peak. It usually has less than 6 hours between the occurrence of the rainfall and peak flood.**
- Rainfall intensity, rainfall location and distribution, land use and topography, vegetation type and growth/density, soil type, and soil water content all determine how quickly flash flooding can occur, and where it occurs.

IPBES Assessment Reports

A report on the status of biodiversity has been released by the **Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)**.

Major Highlights of the Report

- **Biodiversity Used for Consumption:** The plant kingdom is the biggest representative of species used for consumption. Count is around 31,100 species of wild plants.
 - ✓ It also comprises of wild fish species and aquatic invertebrates as well as wild amphibians, reptiles, birds and mammals.
 - ✓ This is directly impacting biodiversity.
- **Local Variations:** About 34% of marine wild fish stocks are overfished and 66% are fished within biologically sustainable levels.
- **Used for Income and other Source:** One in five people rely on wild plants, algae and fungi for their food and income.
 - ✓ 2.4 billion rely on wood for cooking. About 90% of the 120 million people working in capture fisheries are supported by small-scale fishing.
- **Illegal trade** in wild species, which represents the 3rd largest class of all illegal trade and have estimated annual values of up to \$199 billion, worsen the situation.
 - ✓ Timber and fish make up the largest volumes and value of illegal trade in wild species.
- **Sustainable Use By Indigenous People:** Indigenous people and local communities used local knowledge, practices and spirituality for the sustainable use of wild species.
 - ✓ They respected nature and only took what they needed.
- **Report Focuses Attention Towards Fact That Biodiversity Is Not Valued As Much As It Should Be**
 - ✓ **Countries are focusing more on short-term profits and economic growth**, excluding the consideration of nature in policy decisions.
 - ✓ These **efforts have failed mainly because the people who benefit from biodiversity are not the ones who live with it symbiotically.**

Way forward

- Policy that are inclusive and participatory should be used like Biodiversity act 2002.

- The sustainable use of wild species **needs constant negotiation and adaptive management along with a common understanding of sustainable use.**

About IBPES

- It is an intergovernmental organization, established by member States in 2012.
- In 2010 a resolution of the 65th session of the United Nations General Assembly urged the United Nations Environment Program (UNEP) to convene a plenary meeting to establish IPBES.
- It was established to improve the interface between science and policy on issues of biodiversity and ecosystem services.
- It is intended to serve a similar role to the Intergovernmental Panel on Climate Change (IPCC)

Green Technology Hurt Marine Biodiversity

- A new **study has flagged about the negative impacts of green technology adoption** that could have a major impact on marine biodiversity over the next 5-10 years.
- A **technique called 'horizon scanning'** was used by a team of experts to arrive at their conclusions.

About Horizon Scanning

- It is a **technique for detecting early signs of potentially important developments** through a systematic examination of potential threats and opportunities.
- It is an **effective way of assembling experts from diverse subject areas** to examine common issues and formulate more comprehensive solutions.
- It has been previously **used to identify issues that are now known** to have a universal environmental impact.
- A scan from 2009 gave an early warning about the danger that microplastics (tiny plastic debris smaller than 5 mm) pose to marine environments.

Challenges Associated With Green Technology

1. **Biodegradable Plastic Bags (BPG)** – To counter plastic pollution, BPB has been a new norm. But it does not degrade in ocean in natural environment. This leads amplification of problems.
2. **Renewable Energy Technology** - The growing demand for renewable energy technology, such as lithium batteries for electric cars, also poses a potential threat to marine ecology.
 - ✓ Deep-sea 'brine pools' of more saline water, contain higher concentrations of lithium and could become future sites for extraction. These ecosystems support diverse species, many of which are largely undiscovered.

Way forward

Advanced marine station for ocean biology should be formed to study ocean biology and engineering.

Singalila National Park

Padmaja Naidu Himalayan Zoological Park recently launched a programme to introduce 20 Red Pandas in around five years to the Singalila National Park.

About Singalila National Park

- It is the **highest protected area, located on the Singalila Ridge**, in the Darjeeling district of West Bengal.
- The park was initially a wildlife sanctuary. **In 1992 it was converted into a national park.**
- **In 1994, it was declared a major wild habitat for the red panda.**

About Red Panda

- It is **endemic to the forests of India, Bhutan, Nepal, northern Myanmar and southern China.**
 - ✓ In India, there are two subspecies of panda- Himalayan red panda and Chinese red panda.
- It is the **state animal of Sikkim.**
- They are considered as an indicator species for ecological change.
- It is classified in the Endangered category of the IUCN Red List and protected under Schedule I of the Wildlife Protection Act 1972.

Himalayan Glaciers Resisting Global Warming

- Researchers have taken a significant leap toward solving the mystery of why few pockets of glaciers in the **Karakoram Range are resisting glacial melt due to global warming.**
- The **glaciers of central Karakoram have surprisingly remained unchanged** or slightly increased in the last few decades.
- **This phenomenon is being called 'Karakoram Anomaly'.**

Why Karakoram Range is Resisting Glacial Melt?

- **Western disturbance (WD)** has been instrumental in triggering and maintaining the Karakoram Anomaly since the turn of the century.
- It is the **primary feeder of snowfall** for the region during winters.
- The **contribution of WDs in terms of snowfall volume over the core glacier regions of the Karakoram has increased by about 27% in recent decades.**
- The **precipitation intensity of WDs affecting the Karakoram has increased by around 10%** in the last two decades, which only strengthens their role in maintaining the regional anomaly.

Significance of Glaciers	Effects of Melting Ice Glaciers on Humans & Environment
<ul style="list-style-type: none">• Glaciers are paramount important for river water. The Gangotri Glacier, one of the largest glaciers in Himalayan Mountains, is the source of Ganga River.• About 3 quarters of Earth's freshwater is stored in glaciers.• Many aquatic species in mountainous environments require cold water temperatures to survive which is provided by Glaciers.• Glaciers are the watchdogs of climate change. They are the most visible evidence of global warming today.	<ul style="list-style-type: none">• Biodiversity loss and animals losing homes.• Coral Reefs will disappear - When water levels increase due to glacier melting, sufficient sunlight will not be able to reach the corals.• The economic costs - The adverse effects of melting ice glaciers are flooding and island submersion, which require huge intervention of financial capital to mitigate.• Scarcity of fresh water with the increase in population and reducing the mass of glaciers.

Multidimensional Approach Needed To Tackle Glacial Melting

- Net zero Target by 2070 – India's INDC commitment.
- Artificial glacier of Laddakh by Phunsukh Wangdu for perennial source of water from glaciers.

Gaia Hypothesis

- It was formulated by the chemist James Lovelock in the early 1970s.
- It **proposes that living organisms interact with their inorganic surroundings on Earth to form a synergistic and self-regulating**, complex system that maintains the conditions for life on the planet.
- It was hypothesized that by using the Gaia principle one **can detect life in the atmosphere of other planets**.
- It was **initially criticized for being teleological and against the principles of natural selection**.
- Later refinements aligned it with ideas from fields such as Earth system science, biogeochemistry and systems ecology.
- Main objective of Gaia principle is to protect mother earth. Some of important aspects where Gaia principle is being used:
 - ✓ Organic farming and zero Budget natural farming.
 - ✓ Sustainable development by Brundtland Commission.

Samudrayaan Mission

- It is **India's 1st manned ocean mission** that aims to send 3 persons in an indigenous **submarine vehicle called MATSYA 6000** to a depth of 6000 metres for deep underwater studies.
 - ✓ **Submarines go only about 200 metres.**
- India joined the elite club of nations such as US, Russia, France, Japan, and China to have niche technology and vehicles to carry out subsea activities
- It will help in the exploration of resources like *gas hydrates, polymetallic manganese nodules, hydro-thermal sulphides and cobalt crust*, which are found at depths of the ocean.
- It is a **project of Ministry of Earth Sciences (MoES) under Deep Ocean Mission**.
- The projected timeline is five years for the period 2020-2021 to 2025-2026.
- **National Institute of Ocean Technology (NIOT), an autonomous institute under MoES, is entrusted with the responsibility to develop various technologies** related to the mission.







Significance Of This Mission	Concerns
<ul style="list-style-type: none"> • The Mission will open up greater opportunities for growth in the areas of clean energy, drinking water, and the blue economy. • It will also develop deep-sea technology for long-term ocean resource management. • The mission boosts the scientific capacity along with providing a sense of esteem. 	<ul style="list-style-type: none"> • Mining in the deep ocean can lead to a disrupted ecological balance for these species or even extinction if done unregulated. • Another cause of concern is the sediment plumes that may have formed after the mining practice and the oil spills which may be caused. • There are threats of oil and chemical spills from the vessels operating at the site.





India appears to be positive with research as big disclosures can be made after the research starts. Though strict guidelines have been framed, they need better and stricter enforcement.

Deep Ocean Mission

- It is **launched by the Ministry of Earth Sciences in June 2021.**
- **ISRO is one of the collaborators for implementation of this Mission.**
- The mission is expected to explore the deep ocean for resources and at the same time, develop deep sea technologies that can be used for sustainable use of ocean resources.

Species In The News

<p>Red Weaver Ants</p> 	<ul style="list-style-type: none"> • In Odisha, red weaver ants are consumed in the form of a Chutney known as 'Kai Chutney' and scientists have sought a GI tag for the dish. • It helps in getting rid of flu, common cold, whooping cough, to increase appetite, enhance vision and eyesight naturally. • The tribal healers also prepare medicinal oil, which is used as baby oil and externally used to cure rheumatism, gout, ringworm and other skin diseases. • These ants live in colonies consisting of multiple nests on trees. • Each nest is made of leaves stitched together using the silk produced by their larvae, and can withstand strong winds and can be water-tight. • These ants are indigenous to Mayurbhanj, Odisha.
<p>Varroa Mite</p> 	<ul style="list-style-type: none"> • It is an external parasitic mite that attacks and feeds on the honey bees. • The disease caused by the mites is called varroosis. • It can reproduce only in a honey bee colony. • It attaches to the body of the bee and weakens the bee by sucking fat bodies.
<p>Chenkurinji</p> 	<ul style="list-style-type: none"> • It is a species of a tree, endemic to the <u><i>Agasthyamala Biosphere Reserve</i></u>. • It was once abundant in the hills on the southern parts of the <u><i>Aryankavu Pass in Kerala's Kollam district</i></u>. • It is very susceptible to climate change and the present condition of the species is quite bad with low regeneration performance. • It has medicinal properties and is used to lower blood pressure and treat arthritis.
<p>Eoscansor cobrensis</p> 	<ul style="list-style-type: none"> • A team of researchers published paper on its fossil discovery • It is a reptile, belonging to Pennsylvanian subperiod of Carboniferous period, around 305 million years ago. • It used to live in area around present-day New Mexico. • The species belong to Varanopidae, which is an extinct family of reptiles. They were similar to monitor lizards. • The ancient reptile was 24.5 cm in length and 58.3 g in weight.
<p>Nairobi/ Kenyan flies</p> 	<ul style="list-style-type: none"> • It has been seen in Sikkim recently. • It is the common name for two species of rove beetle in the genus Paederus. • It is native to East Africa. • The beetles contain a corrosive substance known as pederin, which can cause chemical burns if it comes into contact with skin. Because of these burns, it is sometimes referred to as a dragon bug.
<p>Utricularia Furcellata</p> 	<ul style="list-style-type: none"> • It is a rare carnivorous plant found for first time in western Himalayan region. • These plants are mostly found in fresh water and wet soil. • Its targets range from protozoa to insects, mosquito larvae and even the young tadpoles. • The species face threat due to heavy biotic pressure because of being at a tourist spot.

<p>Monarch Butterfly</p> 	<ul style="list-style-type: none"> • It has been recently classified endangered in the International Union for Conservation of Nature (IUCN) Red List. • Most of these butterflies are found in winter in the California coast and forests in central Mexico. • A smaller population of the species is also found in countries like Australia, Hawaii and India. • They breed in only one particular plant The Milkweeds • Habitat destruction and climate change are mainly responsible for pushing the insect towards extinction
<p>Snow Leopard</p> 	<ul style="list-style-type: none"> • It is a large member of the cat family native to the mountain ranges of Central and South Asia. • It acts as an indicator of the health of the mountain ecosystem in which they live. • It is the State animal of Himachal Pradesh • Hemis National Park in Ladakh, is famous as the Capital of Snow Leopard in India. • It is listed as Vulnerable in the IUCN Red List and Schedule I on Indian Wildlife (Protection) Act 1972.
<p>Cornechiniscus mystacinus</p> 	<ul style="list-style-type: none"> • In the recent study, it was found that, one tardigrade (diverse group of microscopic invertebrates) represented a previously undiscovered species, called Cornechiniscus Mystacinus. • The species are commonly found in mountains of Tashkomur in Jalalabat region of northern Kyrgyzstan. • It is found in yellow to dark orange colour. • Tardigrades can survive for up to 30 years, without food or water & even in extreme conditions
<p>Light-mantled Albatross</p> 	<ul style="list-style-type: none"> • It is a species of bird, native to the Antarctic seas. Recently it was recorded in Tamil Nadu. • It is also, known as the grey-mantled albatross or the light-mantled sooty albatross. It spends most of their lives in flight. • It is listed as Near Threatened IUCN Red list.

POEM Platform

ISRO successfully launched the **PSLV Orbital Experimental Module or 'POEM'**.

- Besides this achievement, ISRO also launched three satellites from Singapore on the PSLV-C53 (55th Flight).
- This was the second dedicated commercial mission of NewSpace India Limited (NSIL), the commercial arm of ISRO.

About POEM

- It is a platform that will **help perform in-orbit scientific experiments during the 4th stage of the Polar Satellite Launch Vehicle (PSLV).**
- **The PSLV is a four-stage rocket** where the first three spent stages fall back into the ocean, and the final stage (PS4) after launching the satellite into orbit ends up as space junk.
- **With the help of the POEM, in PSLV-C53 mission, the PS4 stage would orbit the earth as a stabilized platform** to perform experiments.
- It will derive its power from *solar panels* mounted around the PS4 tank, and a *Li-Ion battery*.
- It has a **dedicated Navigation Guidance and Control (NGC) system** for attitude stabilization, which stands for controlling the orientation of any aerospace vehicle within permitted limits.
- It will navigate using four sun sensors, a magnetometer, gyros & NavIC.
- It has telecommand feature activated.
- It has specialised control thrusters that use Helium gas storage.
- 'POEM' is a technological advancement over what ISRO attempted in 2019, during the launch of the PSLV-C44 mission.

Polar Satellite Launch Vehicle (PSLV)

- It is the 3rd generation launch vehicle of India.
- It is the 1st Indian launch vehicle to be equipped with liquid stages.
- Notable launches are – Chandrayaan-1 in 2008 and Mars Orbiter Spacecraft in 2013.
- It is a four-stage launch vehicle -
 - A large solid rocket motor forming the 1st stage
 - An earth storable liquid stage as the 2nd stage
 - A high-performance solid rocket motor as 3rd stage
 - A liquid stage with engines as 4th stage

Autonomous Flying Wing Technology Demonstrator

DRDO successfully carried out the maiden test flight of a new **Unmanned Aerial Vehicle (UAV)**, an autonomous Flying Wing Technology Demonstrator

About Autonomous Flying Wing Technology

- It is an Unmanned Combat Aerial Vehicle (UCAV) or a **combat drone** that is a **flying wing type**.
- It is designed and developed by **Aeronautical Development Establishment (ADE)**, Bengaluru.
- The airframe, undercarriage and entire flight control and avionics systems used for the aircraft were developed indigenously.
- It is a **tailless fixed-wing aircraft which houses its payload and fuel in its main wings** and does not have a defined fuselage-like structure found in conventional aircrafts.
- It has a key operational advantage **because it has low reflective cross sections resulting in low radar signature, making it a stealth machine.**

- Because of the shape, the aircraft **also has very low drag or air resistance**.
- This unique design also comes with its issues related to stability and thus requires additional systems.

Other Related Developments

- Rustom-2, the indigenous **Medium Altitude Long Endurance (MALE) UAV** under development, has crossed a milestone by reaching an altitude of 25,000 feet and an endurance of 10 hours and is being designed to reach an altitude of 30,000 feet and 18 hours endurance.
- The DRDO has in the past developed various drones, like **Nishant, Rustom, Tapas and Lakshya** among others, which have different capabilities and operational roles.

Leprosy

Clofazimine, a key drug for the treatment of leprosy, which had been in short supply in the Indian market for several months, is now “not available”. The medicine is available in the government sector [government hospitals and primary health centres]. It is in the private sector that shortage is being felt

About Leprosy

- Also known as Hansen’s disease, it is a chronic infectious disease caused by **Mycobacterium leprae (bacteria)**.
- The disease mainly affects the skin, the peripheral nerves, mucosa of upper respiratory tract, and the eyes.
- **Mode of Transmission:** Mainly by breathing airborne droplets from the affected individuals. It can be contacted at any age.
 - ✓ Prolonged, close contact with someone with untreated leprosy is needed to catch the disease. You cannot get leprosy from a casual contact (Shaking hands or hugging)
- World Leprosy Day is observed on the last Sunday of January.
- According to WHO, leprosy is endemic in several States and UT of India, with an annual case detection rate of 4.56 per 10,000 population.

Steps Taken to Eliminate Leprosy

- **World Bank** supported the **National Leprosy Elimination Project** started from 1993-94.
- **National Leprosy Control Programme** was launched by the Govt. of India in 1954- 55.
- **Multi Drug Therapy (MDT)** came into wide use from 1982, and the National Leprosy Eradication Programme was introduced in 1983.
- In 2017, the **SPARSH Leprosy Awareness Campaign** was launched to promote awareness and address the issues of stigma and discrimination.
- **Global Leprosy Strategy 2021–2030** “Towards zero leprosy” was developed during 2019 & 2020.

Anthrax

- It is also **known as malignant pustule or woolsorter’s disease**.
- It is a serious infectious disease **caused by gram-positive, rod-shaped bacteria known as Bacillus anthracis**.
- Anthrax bacteria survive in the environment by forming spores. People get infected with anthrax when spores get into the body.
- It **occurs naturally in soil and commonly affects domestic and wild animals**.
- People can get sick if they come in contact with infected animals or contaminated animal products.

- Anthrax is **not contagious**, which means you can't catch it from another person like the cold or flu. But it's possible that anthrax skin lesions may be contagious through direct contact.

Treatment

According to WHO, **antibiotic therapy given in early stages** of infection has proved to be responsive. Penicillin has long been the antibiotic of choice and in recent years, ciprofloxacin and doxycycline have also been used as alternatives.

ARYABHAT-1

- IISc researchers have built a prototype of **an analog chipset called ARYABHAT-1** (Analog Reconfigurable Technology and Bias-Scalable Hardware for AI Tasks).
- It will allow Artificial Intelligence and Machine Learning apps to perform much better and faster. Especially helpful for AI-based applications which deal with object or speech recognition systems, like Alexa or Siri
- It is **capable of running robustly across a wide range of temperatures as well as supports programming of different machine learning architectures.**
- It will use less power as compared to digital processors used in different electronic gadgets.
- Digital chips are used in many electronic devices, especially those require computers because design process is scalable and straightforward.

World Zoonoses Day

It is celebrated on July 6, across the world annually, to spread awareness on infectious diseases, which are collectively called as zoonotic diseases.

About Zoonotic Diseases

- **It is a disease or infection that can be transmitted naturally from vertebrate animals to humans or from humans to vertebrate animals.**
- More than **60% of human pathogens are zoonotic in origin.** This includes a wide variety of bacteria, viruses, fungi, protozoa, parasites, and other pathogens.
- Some of the common zoonotic diseases are Rabies, Ebola, Swine flu, Zika & Ebola viruses, plague, dengue, chikungunya, Japanese encephalitis and Covid-19.

Factors Influencing Relevance of Zoonoses

- **Ecological changes in man's environment** -- With the expansion of human population, man exploits natural resources, all this will prompt humans to enter the unaccountable ecosystem in which potential pathogens exist.
- **Handling animal by-products and wastes** - There is significantly higher chance of attack while handling these waste.
- **Increased movements of man** - It expose the people to contaminated food and water leading to diseases like amoebiasis, salmonellosis, shigellosis, etc.
 - ✓ Salmonella live in the intestinal tracts of animals, including birds.
 - ✓ Shigella bacteria are usually found in stool of people who are infected.
- **Increased trade in animal products** - Countries which import from an area where some of the zoonoses are endemic, are likely to introduce the disease into their territories.

How Can Zoonoses Be Treated?

- Viral zoonoses are not easy to treat.

- Some of the available treatments include vaccination, antiviral medications, and adjuvant therapy (augmentation therapy).
- One can rely on herbal medicines and dietary polyphenols.
- Bacterial zoonoses are treated with antibiotics.

Large Hadron Collider (LHC)

- The European Organisation for Nuclear Research (CERN) has reignited the Large Hadron Collider for 3rd time.
- LHC, the **world's most powerful particle collider**, began breaking protons at energy levels that previously did not exist.
- It will operate round-the-clock for 4 years at unprecedented energy levels of 13 tera electron volts. (An electron volt is the energy given to an electron by accelerating it through 1 volt of electric potential difference).
- Now, scientists will record and analyse the data. This is likely to throw evidence of physics beyond the Standard Model of particle physics.

Standard Model of particle physics is the theory which describes 3 of the 4 known fundamental forces (electromagnetic, weak, and strong interactions, not including gravitational force) in the universe, as well as classifies all known elementary particles.

About LHC



- It is a giant, complex machine built **to study particles that are the smallest known building blocks of all things**.
- It is a 27-km-long track-loop buried 100 metres underground on the Swiss-French border.
- In its operational state, it fires two beams of protons almost at the speed of light in opposite directions inside a ring of superconducting electromagnets.
 - The goal of the LHC is to allow physicists to test the predictions of various theories of particle physics.

How does it work?

- Superconducting electromagnets create magnetic fields, which in turn keep protons in a tight beam. This guides the protons along the way as they travel through the beam pipe and eventually collide.
- Before the proton collides, another type of magnet is used to squeeze the proton particles together to increase the chance of a collision.

Previous Discovery

- In 2012, scientists announced the discovery of the Higgs boson, or 'God particle', during the first run of the LHC.
 - ✓ The discovery ended decades-long search for a force-carrying subatomic particle, and proved the existence of the Higgs mechanism, a theory that emerged in the mid-sixties.
- Second Run: It began in 2015 and lasted till 2018. The second season of data taking produced five times more data than Run 1.

- India in 2016 became an associate member of CERN. India was inducted as an 'Observer' at CERN in 2004
- Indian scientists have played a significant role in the A Large Ion Collider Experiment (ALICE) and Compact Muon Solenoid (CMS) experiments that led to the discovery of the Higgs Boson.

Single-crystalline Scandium Nitride (ScN)

- Researchers at Bengaluru's Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) have discovered a new material called **single-crystalline scandium nitride (ScN)**.

- It can emit, detect, and modulate infrared light with high efficiency making it useful for solar and thermal energy harvesting and for optical communication devices.
- It is **able to convert infrared light into renewable energy**.
- **Researchers have utilized a scientific phenomenon called polariton** (a quasi-particle) **excitations** that occur in tailored materials when light couples with either the collective free electron oscillations or polar lattice vibrations to achieve this feat.
- Scientists have carefully controlled material properties to excite polaritons and achieve strong light-matter interactions in ScN using infrared light.

Infrared Light

- It is **electromagnetic radiation with wavelengths longer than those of visible light**.
- People encounter Infrared waves every day; the **human eye can't see it**, but humans can detect it as heat.
- Infrared radiation is **used in industrial, scientific, military, commercial, and medical applications**.

Wolbachia

- The scientists have been cross-breeding local Aedes aegypti mosquitoes, which transmit dengue, chikungunya and zika virus, with mosquitoes that carry the **Wolbachia bacteria**.
- The Aedes aegypti mosquito cannot spread these when they are artificially infected with a bacterium, Wolbachia.

About Wolbachia

- It is an extremely **common bacteria that occur naturally in 50% of insect species**, including some mosquitoes, fruit flies, moths, dragonflies and butterflies.
- However, Wolbachia is not usually found in the Aedes aegypti mosquito
- It **lives inside insect cells & are passed from one generation to next** through an insect's eggs.

Significance

- Independent risk analyses indicate that the release of **Wolbachia-infected mosquitoes poses negligible risk to humans and the environment**.
- The approach **could complement traditional methods such as insecticide sprays**, which often fail to control disease.
- Because the bacterium spreads on its own, **it could be more cost effective than population-reducing approaches** such as genetic engineering.

GigaMesh

A total of 15 villages in different parts of the country may soon be seamlessly connected through a **next-generation networking solution called GigaMesh** that can address congestion issues in 4G infrastructure.

About The GigaMesh

- It has been developed by deep-tech startup Astrom.
- It is the **world's 1st multi-beam E-band radio**, capable of simultaneous communication from a single tower to multiple towers.
- A single GigaMesh device can provide up to forty links with 2+ Gbps capacity, which can communicate up to a range of ten kilometres.

- This flexibility in range makes it **suitable for both decongesting the dense urban networks and extending rural coverage**. Also, it lowers cost and is driven by software to make it easy to deploy, maintain and repair remotely.

Marburg Virus Disease

WHO declared an outbreak of the highly-infectious Marburg virus in Ghana.

About Marburg Virus

- It's a **highly infectious viral haemorrhagic fever** belongs to the **same family as Ebola**.
- It has a **fatality ratio of up to 88%**.
- **Fruit bats** are the key **carriers of the disease**.
- Human-to-human transmission occurs through direct contact with the blood, secretions, organs, or other bodily fluids of infected people and with surfaces contaminated with these fluids.
- There are **no specific vaccines or antiviral treatments** to treat the disease. While the Ebola vaccine may potentially protect against a Marburg virus infection.

PIVOT

- The researchers at the IIT Madras have developed an **Artificial Intelligence (AI)-based tool, 'PIVOT'**.
- It is **capable of predicting cancer-causing genes** in patients.
- It is a machine learning tool which uses different kinds of data, such as mutation and gene expression, to predict cancer-causing genes, called driver genes, in a patient.
- This tool is **also capable to foresee new cancer-related genes such as PRKCA, SOX9 and PSMD4**.

Cervavac

The Drugs Controller General of India (DGCI) granted market authorisation for the Quadrivalent Human Papillomavirus vaccine (qHPV), Cervavac. Presently India is fully dependent on foreign manufacturers for the HPV vaccine.

About Cervavac

- It is the **country's first qHP vaccine manufactured** by Pune-based Serum Institute of India (SII).
- The vaccine **protects women against cervical cancer**.
- The vaccine can be **administered to those in the 9 -26 age group**.
- It is both affordable and accessible.

About HPV

- It is the most **common viral infection of the reproductive tract**.
- More than 90% of the infected population eventually clears the infection.
- **Cervical cancer is by far the most common HPV-related disease**.

Data on Cervical Cancer

- **Cervical cancer in India is the 2nd most frequent cancer among women**.
- It is a leading cancer among women, with **about 132,000 cases and 74,000 deaths annually in India**, according to the Indian Council of Medical Research (ICMR).

- **India contributes 17 % of the world’s population but shares around 1/5th of the global cervical cancer burden.**

James Webb Space Telescope (JWST)

NASA’s James Webb Space Telescope has **delivered the deepest and sharpest infrared image of the distant universe so far.**

About James Webb Space Telescope

- It is a **joint venture between the US (NASA), European space agencies (ESA) and Canadian space agencies (CSA).**
- It is an orbiting infrared observatory, with longer wavelength coverage.
- It is currently at a point in space known as the Sun-Earth L2 Lagrange point.
- It is **studying every phase in the history of our Universe**, ranging from the first luminous glows after the Big Bang, to the formation of solar systems.

Artemis Accords

- This accord ensures that space exploration is conducted in a safe, sustainable and transparent manner and in full compliance with international law.
- Signatories to the accords are the U.S., Australia, Britain, Canada, Italy, Japan, Luxembourg, South Korea, the United Arab Emirates, Ukraine and New Zealand.

India’s 1st Indigenously Developed Lithium-Ion Cell

- **Ola Electric, uncovered India’s first indigenously developed lithium-ion cell called NMC 2170.**
- It **comprises of Nickel-Manganese-Cobalt (NMC)** on cathode side while graphite & silicon on anode side.
- It makes use of specific chemistry and materials, which helps the cell in packing more energy in a given space. It also improves overall life cycle of the lithium-ion cell.

Significance of Lithium-ion Cell

- Li-ion batteries are **able to be recharged hundreds of times and are more stable.**
- They **tend to have a higher energy density, voltage capacity and lower self-discharge rate than other rechargeable batteries.**

About Lithium

- It is a **unique soft, silvery-white fragile element.**
- It was the **only metal produced in the Big Bang that created the universe.**
- **Chile has the largest reserves** followed by Australia and Argentina
- Recently, Researchers at the Atomic Minerals Directorate have estimated lithium reserves of 14,100 tonnes in a small patch of land surveyed in Southern Karnataka.

POP-FAME

- Researchers from US Lawrence-Berkeley Lab recently developed **POP-FAME, which is a fuel from a bacterium.**
- POP-FAME stands for “Polycyclopropanated Fatty Acid Methyl Ester”.

- It carries more energy than petrol or some conventional rocket fuels.
- However, scientists have **not yet produced enough fuel for field trials**. You would need 10kg of fuel for the actual test in a real rocket engine.

Y- 3023 Dunagiri

The Defence Minister of India launched Y- 3023 Dunagiri.

- It is the **4th warship of Project 17A**.
- It is built by Garden Reach Shipbuilders Limited (GRSE) for Indian Navy.
- It is named after a mountain range in the state of Uttarakhand.
- It is the reincarnation of the erstwhile Dunagiri, the Leander Class ASW Frigate, which was decommissioned in 2010.

Project 17A

- It is a **follow-on of the P17 Frigates (Shivalik Class)** with improved stealth features, advanced weapons and sensors and platform management systems.
- Total of **7 ships are under construction under this project**.
- The ships are **Nilgiri, Himgiri, Udayagiri, Dunagiri, Taragiri, Vindhyagiri and Mahendragiri**, which are named after the mountain ranges in India.

NIXI

- The National Internet Exchange of India is the neutral meeting point of internet service provider (ISPs) in India.
- It is a non-profit company incorporated under section 8 under Companies Act 2013.
- It was set up for peering of ISPs among themselves for the purpose of routing the domestic traffic within the country.
- It has been working since 2003 to spread internet technology to the citizens of India.

AlphaFold

- AlphaFold is an artificial intelligence program developed by Alphabet's/Google's DeepMind which performs predictions of protein structure.
- The Telomere-to-Telomere (T2T) consortium is an open, community-based effort to generate the first complete assembly of a human genome.

Kill Switch

The Uber Files reveal that the company had deployed kill switches, purportedly to destroy sensitive data that could have been legitimately accessed by police and officials.

About Kill Switch

- It is a **mechanism used to shut down or disable a device or program**.
- The purpose of a kill switch is usually to prevent theft of data or shut down machinery in an emergency.
- The degree to which a kill switch limits, alters or stops an action or activity depends on the production, process or program it is intended to protect.

INS Sindhudhvaj

- It has been decommissioned after 35 years of glorious service to the nation. Navy has left with only 15 conventional submarines in service.
- It **was one of the 10, Kilo-class submarine acquired from Russia between 1986 -2000.**
- It was **commissioned into Indian Navy in June 1987.**
- It had many firsts to her credit including operationalization of the indigenized sonar USHUS, Indigenised Satellite Communication systems Rukmani and MSS, Inertial Navigation System, and Indigenised Torpedo Fire Control System.
- It was the only submarine awarded the CNS Rolling trophy for Innovation by the Prime Minister.

LUX-ZEPLIN (LZ)

A highly sensitive experiment named LUX-ZEPLIN (LZ) has been used to detect dark matter in the universe by the U.S.

About LUX-ZEPLIN (LZ)

- It is the **most sensitive dark matter detector of the world.**
- It has been **installed deep down the Black Hills in South Dakota in *Sanford Underground Research Facility (SURF).***
- The experiment is led by DOE's Lawrence Berkeley National Laboratory (Berkeley Lab).

About Dark Matter

- It is made up of **particles that do not have a charge.**
- It is **invisible. It doesn't emit, reflect or absorb light or any type of electromagnetic radiation.**
- Only 5% of the entire visible universe is made up of all matter and the rest of 95% is dark matter and dark energy.

Serotonin

New study suggests that **depression is not caused by serotonin imbalance** in brain.

About Serotonin

- Its **chemical name is 5-hydroxytryptamine (5-HT).**
- It is a **monoamine neurotransmitter** which means, it is a chemical that signals between neurons.
- It is believed to **help regulate mood & social behaviour, appetite, digestion, sleep, memory, and sexual desire.**
- At level of an organism, serotonin is known to be helpful in coping with stress. But, underlying mechanism of its neuro-protective role was unknown.

Fiberisation

- The **process of connecting radio towers with each other via optical fibre cables is called fiberisation.**
- It **helps provide full utilisation of network capacity,** and carry large amounts of data once 5G services are rolled out.

Status Of Fiberisation In India

- **At present, in India, only 33% of the towers are fiberized.** It is very low compared to the 65%-70% in South Korea and 80%-90% in the U.S., Japan and China.
 - ✓ To transition into 5G, India needs at least 16 times more fibre
- **India's fibre kilometer (fkm) per capita is just 0.09** compared to 1.35 in Japan, 1.34 in the U.S. and 1.3 in China. Ideally, a country needs 1.3 km of fibre per capita to ensure good fiberisation.
- The tower sites which are connected via fibre are called fibre point of presence (POP). Currently, **India's fibre POP can just handle data at 1-5 Gbps speed.**

Challenges In Fiberisation

- India **requires about ₹2.2 lakh crore of investment to help fiberise 70% towers.**
- India laid out the vision in 2020 to connect every village in the country with optical fiber cable (OFC) in 1,000 days.
 - ✓ To achieve that vision, cables must be laid at a speed of 1,251 km a day, around 3.6 times the current average speed of 350 km a day.
- Indian Telegraph **Right of Way (RoW) Rules 2016** aim to incorporate nominal one-time compensation and uniform procedure for establishment of **Overground Telegraph Line (OTL)** anywhere in the country.
 - ✓ While all States/UTs are required to implement these rules. The **implementation in all states is not in complete alignment to the central rules.**

Way Forward

- GatiShakti Sanchar online portal will enable centralisation of RoW approvals for telecom infrastructure projects, including 5G.
- There is also a need to increase data capacity in the fiberised towers.

Aneurysm

- It is an **abnormal bulge or ballooning in the wall of a blood vessel** (arteries and vein)
- It occurs most commonly in the aorta, back of the knees, brain or intestines.
- **If the aneurysm gets ruptured, it can even cause internal bleeding and stroke.**
- Pregnancy can also increase risk of aneurysm of the spleen.

Treatment

- A device **called flow diversion stent is a new innovative intervention for treatment of aneurysm for the initial stages, when it has not ruptured.**
- A cylindrical, metallic mesh stent is placed inside the sac of the parent blood vessel to divert the blood flow from the aneurysm.

Monkeypox

- WHO has **Declared Global Health Emergency** and sounded the highest alarm on the Monkeypox Virus.
- It means the monkeypox outbreak is an extraordinary event that could spill over into more countries and requires a coordinated global response.

About Monkeypox

- It is a **rare viral infection similar to smallpox.** It is a **zoonotic disease** which mean it is a disease that is transmitted from infected animals to humans.
- The infection has been detected in **squirrels, Gambian poached rats, dormice, & few species of monkeys.**

- Symptoms includes fever, headache, muscle aches, back ache, and exhaustion.
- **Human-to-human transmission is limited.**

Treatment

- There is **no safe, proven treatment for monkeypox** yet. **WHO recommends supportive treatment** depending on symptoms.

Google's Street View Feature

Google announced the launch of its popular Street View feature in 10 Indian cities, which is also known as **Project Gullify**.

About Street View Feature

- It is an **immersive 360-degree view of a location** captured using cameras by data collectors moving around the city streets.
- Google has partnered with two Indian firms, mapping solutions provider Genesys International and Tech Mahindra.
 - ✓ Google has to partner with Indian firm because as per **National Geospatial Policy, 2021** foreign companies are prohibited from collecting and owning certain categories of data / maps.
 - ✓ **Local companies can collect such data and foreign firms can license the data** from Indian entities to serve their customers in the country.

Significance

- It **will help people to navigate and explore new corners of the country** and the world in a more visual and accurate way. It will enable them to fully experience what it's like to be in these places, right from their phone or computer.
- Because of its integration with Google Maps, Street View is expected to have a much greater impact, assisting users in better understanding road conditions and discovering local businesses.
- Google Maps has also announced the addition of speed limit data for Bengaluru and Chandigarh, as well as road congestion data for 9 cities.
- It is also developing the environmental insights explorer tool, which will allow planners to better understand how to reduce emissions in cities by measuring emissions based on traffic patterns.
- In a few cities, it will also begin to display localised street-level Air Quality Index (AQI) numbers.
- This data will aid in infrastructure planning and will spark new use cases, such as the creation of base data for autonomous vehicles in India.

Cytochrome complex (cyt c)

It is a small heme-protein found loosely associated with the inner membrane of the mitochondrion. They function as the electron carriers in respiration and photosynthesis.

Koi herpesvirus (KHV)

- It is a serious viral disease of fish.
- The disease occurs in common carp and its ornamental varieties.
- The disease is transmitted by fish-to-fish contact, and also via angling equipment and contaminated water.

CULTURE

Modhera Sun Temple

- The government recently announced that the Ahmedabad Railway Station will be developed on the theme of Modhera Sun Temple in the next five years.
- Modhera Sun Temple is located in **Mehsana**, neighbouring Ahmedabad district.
- Situated on the bank of the **River Pushpavati**, it was built in the **11th century** during the reign of **Bhima I** of the **Chalukya dynasty** in honour of the Sun God.
- Though it is a Hindu temple, no worship is offered at the temple now.
- A **UNESCO World Heritage Site**, the temple complex has three components:

Gudhamandapa , the shrine hall	Sabhamandapa , the assembly hall	Kunda , the reservoir
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- The Sabha Mandap stands on 52 pillars, signifying the 52 weeks in a year. There are carvings of the sun on the walls to show its unity with air, water, earth and space.
- The temple is designed in such a way that during every equinox, the first ray of the rising sun would fall on a diamond placed on the head of the Sun God.

Mahuli Group of Temples

- The **National Monuments Authority** recently submitted a report on the comprehensive development on Mahuli group of temples to the Ministry of Culture.
- It recommends including Mahuli group of temples in Centrally Protected Monuments list.
- The famous group of temples - known as **Dakshin Kashi**, comprise of **5 temples** belonging to 11th and 12th CE in **Hemadpanthi style of architecture**
- These temples are situated on the **confluence of rivers Krishna and Venna** near Satara in Maharashtra.

Shree Padmanabhaswamy Temple

- The Supreme Court recently extended the time for completion of the special audit of 25 years of accounts of Sree Padmanabhaswamy temple and its trusts to August 31, 2022.
- It is a Hindu temple located in Thiruvananthapuram, Kerala.
- Thiruvananthapuram in Tamil and Malayalam translates to "The City of Lord Ananta", (The City Of Lord Vishnu) referring to the main deity of the temple.
- Historians say the temple dates back to the 8th century but the present structure was built in the 18th century by the then **Travancore Maharaja Marthanda Varma**.
- The temple is built in the unique **Chera style of architecture**, and its main deity is Lord Vishnu who is found in the Anantha Shayana posture (reclined posture of eternal yoga) on Adishesha or king of all serpents.
- It is known to be one of the 108 holy temples associated with Vaishnavism in India.

Bill To Strengthen ASI

According to the Lok Sabha bulletin, the **Ancient Monuments and Archaeological Sites and Remains (Amendment) Bill, 2022** has been listed for introduction and passage by the government.

About The Bill

- The proposed amendment would change **Section 20A** of the Act to rationalise the prohibited and regulated areas.
- It **will replace the provision which allows a 100-metre prohibited area for construction activity** around Centrally-protected monuments with site-specific limits to be decided by an expert committee.
 - ✓ The Section 20 of the Ancient Monuments and Archaeological Sites and Remains (AMASR) Act, 1958, was amended in 2010 to declare the 100-metre radius of protected monuments as prohibited areas and the next 300-metre radius as regulated areas.
- **Expert monument committees** would decide the prohibited area around a particular monument and **activities permitted** herein
 - ✓ **Specific laws:** Given the unique nature of each monument, the Act also proposes **heritage by-laws** for each monument to be prepared by an expert body.
- The **ASI would be given enforcement powers** like in the Forest Act which would empower it to act against those encroaching at protested sites.
- The bill would also seek to **review the list** of protected sites under the ASI.

Concerns Related To New Legislation

- **Endangering The Commons:** Rezoning land around ASI-protected monuments into industrial, commercial, or even residential plots will thus deprive human & animal communities of much-needed commons.
- **Weaken Foundations:** Permitting construction work risks weakening the foundations of centuries-old edifices. For instance, Sacks of cement stacked against a frescoed wall can irreversibly abrade its surface.
- **Anthropogenic Forces:** For example, domestic waste and grey water which regularly seep into the sub-terrain sixth-century **sanctuary at Jogeshwari** in Mumbai. Air and water pollution continue to turn the white marble of the **Taj Mahal** yellow and green, and so on.
- **Worrying Consequences:** The artefacts long buried in layers of soil are at risk of being broken and their contexts destroyed by construction machines.
- **Constitution of Committee:** Concerns related to like who will determine the **make-up of committees** and **criteria** to be used by these committees is still unclear
- **Unclear Mandate:** It is also unclear about **redressal mechanisms** under new amendment and how it will empower the ASI as various statutory bodies like National Monuments Authority (under the Ministry of Culture), is already in place to help the ASI to fulfill its mandate.
- **No Archaeological Impact Assessment:** The Government has built new highways, metro-rail systems, and industrial parks without methodical archaeological impact assessments which has led to the shattering of numerous historical artefacts.

Constitutional Provisions for Protection of Cultural Heritage

- **Fundamental Duties, Article 51 (A)** - It shall be the duty of every citizen of India to value and preserve the rich heritage of our composite culture.
- **DPSP, Article 49** – It shall be the obligation of the State to protect every monument or place or object of artistic or historic interest, declared by or under law made by Parliament

Schemes and Initiatives Related to Cultural Heritage

- **“Scheme for Safeguarding India’s Intangible Heritage and Diverse Cultural Traditions”:** To revive and revitalize various institutions and to strengthen, preserve, & promote India's rich intangible cultural heritage.
- **National Virtual Library:** To bring together all the information on India’s rich heritage.

- **The conservation portal of the ASI** is a tracking portal that checks all the conservation and developmental works that are done in India.
- The **retrieval of stolen antiques from abroad**, example - the bronze Nataraja and the stone object of Ardhnarishwara from Australia.
- **Swachh Smarak**: Polythene Free Zones are declared in ASI Protected Historical Monuments and Archaeological Sites. Major sites were designated as **Adarsh sites**.
- **Sanskriti App** allows to observe Indian cultural activities such as music, dance, and theatre. Literature, film presentations, and other forms of entertainment.
- **Rashtriya Sanskriti Mahotsav** held once a year to highlight India's cultural heritage

About ASI

- It is the premier **organization under the Ministry of Culture for archaeological researches and protection of the cultural heritage of the nation**.
- It was founded in 1861 by Alexander Cunningham who also became its first Director-General.
- **The laws of the Ancient Monuments and Archaeological Sites and Remains Act (AMASR Act) of 1958 govern all archaeological activity in the nation**.
- After independence, the AMASR Act of 1958 established the **ASI as a statutory entity**.
- It also regulates the Antiquities and Art Treasure Act, 1972.
- For the maintenance of ancient monuments and archaeological sites and remains of national importance the entire country is divided into **24 circles**.
- At present, 3,691 monuments nationwide are protected by ASI, with the **highest, 745, in Uttar Pradesh**.

India In UNESCO Panel on Intangible Cultural Heritage

- India has been elected a member of the Intergovernmental Committee of UNESCO's 2003 *Convention for the Safeguarding of the Intangible Cultural Heritage (ICH)* for the 2022-2026.
 - ✓ India has served as a member of ICH Committee twice — from 2006 -2010 & from 2014-2018.
- Earlier, in November 2021, India was re-elected to the executive board of UNESCO for 2021-25.

Intangible Cultural Heritage (ICH) also called living cultural heritage, is usually expressed in following forms:




India has 14 intangible cultural heritage elements

ICH Element		ICH Element	
1	Tradition of Vedic chanting, 2008	8	Buddhist chanting of Ladakh: recitation of sacred Buddhist texts in the trans-Himalayan Ladakh region, 2012
2	Ramlila, the traditional performance of the Ramayana, 2008	9	Sankirtana, ritual singing, drumming and dancing of Manipur, 2013
3	Koodiyattam, Sanskrit theatre, 2008	10	Traditional brass and copper craft of utensil making among the Thatheras of Jandiala Guru, Punjab, India, 2014
4	Ramman, religious festival & ritual theatre of the Garhwal Himalayas	11	Yoga, 2016

	(India), 2009		
5	Mudiyettu, ritual theatre and dance drama of Kerala, 2010	12	Nawrouz, Novruz, Nowrouz, 2016
6	Kalbelia folk songs and dances of Rajasthan, 2010	13	Kumbh Mela, 2017
7	Chhau dance, 2010	14	Durga Puja in Kolkata, 2021

Intergovernmental Committee For The Safeguarding Of The Intangible Cultural Heritage 2003

- Convention of Safeguarding of ICH was adopted by UNESCO in 2003 & entered into force in 2006. It comprises 24 members.
- Members are elected in the General Assembly of the Convention according to the principles of equitable geographical representation and rotation.
- States Members to the Committee are elected for a term of 4 years.
- The core functions of the Intergovernmental Committee for the Safeguarding of ICH are to:
 - ✓ promote the objectives of the convention,
 - ✓ provide guidance on best practices
 - ✓ make recommendations on measures for safeguarding of the ICH
- It also examines requests submitted by States Parties for the inscription of intangible heritage on the Lists. The committee is also in charge of granting international assistance.



About UNESCO

UNESCO stands for United Nations Educational, Scientific and Cultural Organization

▲ It is **specialized agency** of the United Nations (UN). The constitution, which entered into force in 1946, called for the promotion of international collaboration in education, science, and culture.

- ▲ UNESCO's mission is to contribute to the building of a culture of peace, the **eradication of poverty, sustainable development** and intercultural dialogue through education, the sciences, culture, communication and information.
- ▲ The agency's permanent headquarters are in Paris, France.
- ▲ **Parent Organisation** - United Nations Economic and Social Council

Executive board of UNESCO

- ▲ The executive board of the UNESCO is **one of three constitutional organs** of the UN agency. The other two are the **General Conference and the Secretariat**.
 - The General Conference elects members of the executive board
- ▲ The executive board consists of 58 member-states, each with a four-year term.
- ▲ It examines the programme of work for the organisation and corresponding budget estimates submitted to it by the director-general
- ▲ The board represents exercises the power delegated to it by the General Conference and deals with the questions with which it is entrusted.

Mangarh Hillock

- A team from National Monuments Authority recently submitted a report on declaring Mangarh hillock in Rajasthan as a monument of National Importance.
- The hillock, situated at the Gujarat-Rajasthan border, is a site of a tribal uprising where a massacre of over 1500 Bhil tribal freedom fighters took place.

- Facing harassment under the old feudal structure and then subsequently under British rule, the Bhils came together under the social reform movement, the **Bhagat Movement** started in 1908 by **Govind Giri**.
- On November 17, 1913, British forces opened fire on tribals gathered at the site who were holding a meeting in protest.
- Due to this, the place is also known as the **Adivasi Jallianwala**.

Bhils

- The Bhils are one of the largest tribal groups, living in Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Andhra Pradesh and Rajasthan. They speak a language of Dravidian origin.
- The word Bhil comes from '**billu**' which means **bow** in the Dravidian language.
- The community is also known as the "**Dhanush Purush of India**" for having an excellent knowledge of bows.
- Traditionally, experts in guerrilla warfare, most of them today are farmers and agricultural labourers. They are also *skilled sculptors*.
- Bhils have traditional medical specialists - Budwa (Male Shaman), Huvarki (Midwife), Vaidu (herbalist) and Had Vaidu (Bone setter) with some communities having male midwives.
- **Ghoomar** is a traditional folk dance of the Bhil tribe.

National Monuments Authority (NMA)

- NMA under the **Ministry of Culture** has been set up as per provisions of the **Ancient Monuments and Archaeological Sites and Remains AMASR (Amendment and Validation) Act, 2010**.
- Several functions have been assigned to the NMA for the *protection and preservation of monuments and sites* through management of the prohibited and regulated areas around the centrally protected monuments.

Maharaja Serfoji II

- A mid-19 century painting of Maharaja Serfoji II of Thanjavur and his son Sivaji II, stolen from Saraswathi Mahal, was recently traced to a museum in US.
- The painting was probably painted between 1822-1827.
- Serfoji was the last of the **Bhonsle Rajas of Thanjavur**. He ruled Thanjavur from 1798 to 1832. His only son Shivaji ruled until 1855. However, he had no male successor.
- Thanjavur became a casualty of Lord Dalhousie's infamous '*Doctrine of Lapse*', and it got absorbed into British Ruled Indian provinces.

Achievements of Serfoji II

- He devoted his life, interest and wealth for the cultural uplift in spheres of literature, medicine, music, dance, drama and other fine arts. He wrote hundreds of songs in Sanskrit, Telugu, Marathi.
- He was also called **Sarvendra Ratnadhi Pati** since he was the author of the 72 volumes of the **Sarvendra Ratnavali** a compilation of the immense knowledge and wisdom of all the Shastras and Kalaas (Natyashastra).
- He established a *stone type press* called "Nava Vidhya Kalanidhi Varnayanthra Sala".
- He established the '**Dhanvanthri Mahal**' a research institute that produced herbal medicine for human consumption and animals.
- The Saraswathi Mahal Library was founded as a Palace Library by the Nayak kings of Thanjavur (1535-1675). However, Serfoji II enriched it with priceless works, maps, dictionaries and artwork.

Bonalu

- Bonalu, a traditional Hindu festival centred on the **Goddess Mahakali**, was recently celebrated.
- The festival is celebrated annually in the twin cities of Hyderabad and Secunderabad, and parts of Telangana.
- It is celebrated in the Hindu calendar month of **Ashada** that falls in July/August.
- Devotess offer **Bonam** (contraction of Bhojanam, which means a meal), containing cooked rice, jaggery, curd and neem leaves to the Goddess.
- During the festival, people also hold '**rangam**' or forecasting the future, organise processions and cultural events.
- The **Telangana** government accorded the status of **state festival** to Bonalu after the formation of the new state in 2014.

National Emblem Atop New Parliament Building

Prime Minister Modi unveiled a 6.5-metre-tall National Emblem on the roof of the under-construction Parliament building. It is made of bronze, and weighs 9,500 kg.

National Emblem of India

- It is a representative seal of the Republic of India. It is an adaptation of the Lion Capital of Asoka at Sarnath. It was adopted on 26 January 1950.
 - ✓ In the original, there are four lions, mounted back to back, on a circular abacus, which itself rests on a bell-shaped lotus.
 - ✓ The frieze of the abacus has sculptures in high relief of an elephant, a galloping horse, a bull and a lion separated by intervening Dharma Chakras.

Features Of National Emblem

- The adopted version of the State Emblem of India consists of:
 - ✓ The profile of the Lion Capital showing three lions mounted on the abacus with a Dharma Chakra in the centre;
 - ✓ a bull on the right and a galloping horse on the left,
 - ✓ outlines of Dharma Chakras on the extreme right and left.
- The bell-shaped lotus was omitted.
- The motto Satyameva Jayate, written in Devanagari script below the profile of the Lion Capital, is part of the State Emblem of India.