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## 1. INDIAN SOCIETY & POLITY

### 1. Haryana's new Job Quota Rule

#### Why in News?

- The Haryana government has notified a new law that requires 75% of private-sector jobs in the state, up to a specified salary slab, reserved for a local candidate.

#### Haryana Quota Rule:

- The Haryana State Employment of Local Candidates Bill, 2020 requires private companies to set aside for domiciles 75% of jobs up to a monthly salary of Rs 50,000 or as may be notified by the government.
- The law is applicable to all companies, societies, trusts, limited liability partnership firms, partnership firms and any person employing 10 or more persons.

#### Other states with such laws:

- In July 2019, the Andhra Pradesh government had passed a similar law, which was challenged in court.
- The Andhra Pradesh High Court had made a prima facie observation that the move might be unconstitutional, but the challenge is yet to be heard on merits.

#### What are the Legal Issues in Such Laws?

- **Two big legal questions come up.**
  - ❖ Question of domicile reservation:
- While domicile quotas in education are fairly common, courts have been reluctant in expanding this to public employment.
- Last year, the MP government decided to reserve all government jobs for “children of the state”, raising questions relating to the fundamental right to equality of citizens.
  - ❖ (2) Right to Equality:
- The second question, which is more contentious, is the issue of forcing the private sector to comply with reservations in employment.
- For mandating reservation in public employment, the state draws its power from Article 16(4) of the Constitution.
- It says that the right to equality in public employment does not prevent the state from “making any provision for the reservation of appointments or posts in favour of any backward class of citizens which is not adequately represented in the services under the State.

- The Constitution has no manifest provision for private employment from which the state draws the power to make laws mandating reservation.

### Rationale in bringing such laws:

- Providing reservation in public employment is one of the many ways through which the state endeavours to ensure equal opportunity for all citizens.
- With public sector jobs constituting only a minuscule proportion of all jobs, legislators have talked about extending the legal protections to the private sector.
- They aim to really achieve the Constitutional Mandate of equality for all citizens.
- One argument often made in favour of reservation for private jobs is that private industries use public infrastructure in many ways.
- A similar argument was made in requiring private schools to comply with the Right to Education Act, which the Supreme Court also upheld.

### Global Precedences:

- Affirmative action is adopted in many countries in the context of race and gender.
- In the US, there is no statutory requirement for employers to have quotas.
- Courts can order monetary damages and injunctive relief, including “such affirmative action as may be appropriate”, for victims of discrimination.
- The Employment Equity Act in Canada also protects minority groups, especially aboriginals from discrimination in federally regulated industries, even in the private sector.

## 2. Bamiyan Buddhas

### Why in News?

- Two decades later after its destruction, the Bamiyan Buddhas have been brought back to life in the form of 3D projections in an event called “A Night with Buddha”.

### Bamiyan Buddhas:

- In their Roman draperies and with two different mudras, the Bamiyan Buddhas were great examples of a confluence of Gupta, Sassanian and Hellenistic artistic styles.
- They are said to date back to the 5th century AD and were once the tallest standing Buddhas in the world.
- Salsal and Shamama, as they were called by the locals, rose to heights of 55 and 38 metres respectively, and were said to be male and Female.

- Salsal means “the light shines through the universe”; Shamama is “Queen Mother”.
- The statues were set in niches on either end of a cliffside and hewn directly from the sandstone cliffs.

### The Significance of Bamiyan

- Bamiyan is situated in the high mountains of the Hindu Kush in the central highlands of Afghanistan.
- The valley, which is set along the line of the Bamiyan River, was once integral to the early days of the Silk Roads, providing passage for not just merchants, but also culture, religion and language.
- When the Buddhist Kushan Empire spread, acting as a crucible of sorts, Bamiyan became a major trade, cultural and religious centre.
- As China, India and Rome sought passage through Bamiyan, the Kushans were able to develop a syncretic (mix) culture.
- In the rapid spread of Buddhism between the 1st to 5th centuries AD, Bamiyan’s landscape reflected the faith, especially its Monastic Qualities.

### Taliban’s Destruction of the Buddhas

- The hardline Taliban movement, which emerged in the early 1990s, was in control of almost 90 per cent of Afghanistan by the end of the decade.
- The destruction of the Bamiyan Buddhas was part of this extremist culture.
- In February 2001, the Taliban declared its intention to destroy the statues, despite condemnation and protest from Governments and Cultural Ambassadors’ world over.

### The Aftermath of the Destruction

- The Taliban’s destruction of the Bamiyan Buddhas met with global criticism, many of whom saw it as a cultural crime not just against Afghanistan but also against the idea of global syncretism.
- Following the fall, UNESCO included the remains in its list of world heritage sites in 2003, with subsequent efforts made to Restore and Reconstruct.

## 3. Agri Ministry Questions Global Hunger Reports’ Methodology

### Why in News?

- Union Minister of State for Agriculture has questioned the methodology and data accuracy of the Global Hunger Index (GHI) report, which has placed India at 94th (out of 107 countries) rank in 2020.

## GHI:

- GHI is a peer-reviewed annual report, jointly published by Concern Worldwide, an Ireland-based humanitarian group, and Welthungerhilfe, a Germany-based NGO.
- It is designed to comprehensively measure and track hunger at the global, regional, and country levels.
- It says the aim of publishing the report is to trigger action to reduce hunger around the world.
- According to the GHI website, the data for the indicators come from the United Nations and other multilateral agencies, including the World Health Organisation and the World Bank.

## Various Indicators Used:

- **UNDERNOURISHMENT:** the share of the population that is undernourished (that is, whose caloric intake is insufficient);
- **CHILD WASTING:** the share of children under the age of five who are wasted (that is, who have low weight for their height, reflecting acute undernutrition);
- **CHILD STUNTING:** the share of children under the age of five who are stunted (that is, who have low height for their age, reflecting chronic undernutrition); and
- **CHILD MORTALITY:** the mortality rate of children under the age of five (in part, a reflection of the fatal mix of inadequate nutrition and unhealthy environments).

## What is the Concern?

- India was ranked below countries such as Nepal, Bangladesh and Myanmar when it was among the top 10 food-producing countries in the world.

## Actual Scenario:

- The Comprehensive National Nutrition Survey (CNNS) compiled in 2017-18 showed an improvement of 4%, 3.7% and 2.3% in wasted, stunted and malnourished children respectively.
- The first-ever CNNS was commissioned by the government in 2016 and was conducted from 2016-18, led by the Union Health Ministry, in collaboration with the UNICEF.
- The findings were published in 2019. CNNS includes only nutrition data, whereas NFHS Encompasses Overall Health Indicators.



## 4. Sixth Schedule areas of Assam

### Why in News?

- The Ministry of Home Affairs (MHA) has informed the Lok Sabha that presently, there is no proposal to implement the Panchayat system in the Sixth Schedule areas of Assam.

### What is the Sixth Schedule?

- The Sixth Schedule consists of provisions for the administration of tribal areas in Assam, Meghalaya, Tripura and Mizoram, according to Article 244 of the Indian Constitution.
- Passed by the Constituent Assembly in 1949, it seeks to safeguard the rights of the tribal population through the formation of Autonomous District Councils (ADC).
- ADCs are bodies representing a district to which the Constitution has given varying degrees of autonomy within the state legislature.
- The governors of these states are empowered to reorganize the boundaries of the tribal areas. In simpler terms, she or he can choose to include or exclude any area, increase or decrease the boundaries and unite two or more autonomous districts into one.
- They can also alter or change the names of autonomous regions without separate legislation.

### Autonomous Districts and Regional Councils:

- The ADCs are empowered with civil and judicial powers can constitute village courts within their jurisdiction to hear the trial of cases involving the tribes.
- Governors of states that fall under the Sixth Schedule specify the jurisdiction of high courts for each of these cases. Along with ADCs, the Sixth Schedule also provides for separate Regional Councils for each area constituted as an autonomous region.
- In all, there are 10 areas in the Northeast that are registered as autonomous districts – three in Assam, Meghalaya and Mizoram and one in Tripura.

## 5. Uniform Civil Code

### Why in News?

- The Chief Justice of India (CJI) has lauded Goa's Uniform Civil Code and encouraged "intellectuals" indulging in "academic talk" to visit the state to learn more about it.

### Uniform Civil Code?

- A Uniform Civil Code is one that would provide for one law for the entire country, applicable to all religious communities in their personal matters such as marriage, divorce, inheritance, adoption etc.

- Article 44, one of the directive principles of the Constitution lays down that the state shall endeavour to secure a Uniform Civil Code for the citizens throughout the territory of India.
- These, as defined in Article 37, are not justiciable (not enforceable by any court) but the principles laid down therein are Fundamental in Governance.

### **Greater Role for State:**

- Fundamental rights are enforceable in a court of law.
- While Article 44 uses the words “the state shall endeavour”, other Articles in the ‘Directive Principles’ chapter use words such as “in particular strive”; “shall, in particular, direct its policy”; “shall be the obligation of the state” etc.
- Article 43 mentions “state shall endeavour by suitable legislation” while the phrase “by suitable legislation” is absent in Article 44.
- All this implies that the duty of the state is greater in other directive principles than in Article 44.

### **What are more Important – Fundamental Rights or Directive Principles?**

- There is no doubt that fundamental rights are more important.
- The Supreme Court held in *Minerva Mills (1980)*: Indian Constitution is founded on the bedrock of the balance between Parts III (Fundamental Rights) and IV (Directive Principles).
- To give absolute primacy to one over the other is to disturb the harmony of the Constitution.
- Article 31C inserted by the 42nd Amendment in 1976, however, lays down that if a law is made to implement any directive principle, it cannot be challenged on the ground of being violative of the FRs under Articles 14 and 19.

### **Does India not already have a Uniform Code in Civil Matters?**

- Indian laws do follow a uniform code in most civil matters – Indian Contract Act, Civil Procedure Code, Sale of Goods Act, Transfer of Property Act, Partnership Act, Evidence Act etc. States, however, have made hundreds of amendments and therefore in certain matters, there is diversity even under these secular civil laws.
- Recently, several states refused to be governed by the uniform Motor Vehicles Act, 2019.

### **What about Personal Laws?**

- If the framers of the Constitution had intended to have a Uniform Civil Code, they would have given exclusive jurisdiction to Parliament in respect of personal laws, by including this subject in the Union List.

- But “personal laws” are mentioned in the Concurrent List.
- Last year, the Law Commission concluded that a Uniform Civil Code is Neither Feasible nor Desirable.

### **Is there one Common Personal law for Any Religious Community Governing all its Members?**

- All Hindus of the country are not governed by one law, nor are all Muslims or all Christians.
- Not only British legal traditions, even those of the Portuguese and the French remain operative in some parts.
- In Jammu and Kashmir until August 5, 2019, local Hindu law statutes differed from central enactments.
- The Shariat Act of 1937 was extended to J&K a few years ago but has now been repealed.

### **Various Customary Laws:**

- Muslims of Kashmir were Governed by a Customary law, which in many ways was at variance with Muslim Personal Law in the rest of the country and was, in fact, closer to Hindu law.
- Even on the registration of marriage among Muslims, laws differ from place to place. It was compulsory in J&K (1981 Act), and is optional in Bengal, Bihar (both under 1876 Act), Assam (1935 Act) and Odisha (1949 Act).
- In the Northeast, there are more than 200 tribes with their own varied customary laws.
- The Constitution itself protects local customs in Nagaland. Similar protections are enjoyed by Meghalaya and Mizoram.
- Even reformed Hindu law, in spite of codification, protects customary practices.

### **How does the Idea of a Uniform Civil Code relate to the Fundamental Right to Religion?**

- Article 25 lays down an individual’s fundamental right to religion;
- Article 26(b) upholds the right of each religious denomination or any section thereof to “manage its own affairs in matters of religion”;
- Article 29 defines the right to conserve distinctive culture.
- An individual’s freedom of religion under Article 25 is subject to “public order, health, morality” and other provisions relating to FRs, but a group’s freedom under Article 26 has not been subjected to other fundamental rights.

- In the Constituent Assembly, there was division on the issue of putting UCC in the fundamental rights chapter. The matter was settled by a vote.
- By a 5:4 majority, the fundamental rights sub-committee headed by Sardar Patel held that the provision was outside the scope of FRs and therefore the UCC was made less important than freedom of religion.

### **Minority opinion in the Constituent Assembly:**

- Some members sought to immunize Muslim Personal Law from state regulation.
- Mohammed Ismail, who thrice tried unsuccessfully to get Muslim Personal Law exempted from Article 44, said a secular state should not interfere with the personal law of people.
- B Pocker Saheb said he had received representations against a common civil code from various organisations, including Hindu organisations.
- Hussain Imam questioned whether there could ever be uniformity of personal laws in a diverse country like India.
- B R Ambedkar said, “no government can use its provisions in a way that would force the Muslims to revolt”.
- Alladi Krishnaswami, who was in favour of a UCC, conceded that it would be unwise to enact UCC ignoring strong opposition from any community.
- Gender justice was never discussed in these debates.

### **How did the Debate on a Common Code for Hindus play out?**

- In June 1948, Rajendra Prasad, President of the Constituent Assembly, warned Nehru that to introduce “basic changes” in personal law was to impose “progressive ideas” of a “microscopic minority” on the Hindu community as a whole.
- Others opposed to reforms in Hindu law included Sardar Patel, Pattabhi Sitaramayya, M A Ayyangar, M M Malaviya and Kailash Nath Katju.
- When the debate on the Hindu Code Bill took place in December 1949, 23 of 28 speakers opposed it.
- On September 15, 1951, President Prasad threatened to use his powers of returning the Bill to Parliament or vetoing it. Ambedkar eventually had to resign.
- Nehru agreed to trifurcation of the Code into separate Acts and diluted several provisions.

## 2. GOVERNANCE

### 1. E-Daakhil portal

#### Why in News?

- The Union Government has informed that the 'E-Daakhil' portal for consumer grievance redressal is now operational in 15 states and Union Territories (UTs).

#### E-Daakhil:

- The Consumer Protection Act, 2019, which came into force on July 20, 2020, has a provision for e-filing of consumer complaints in the consumer commissions and online payment of the fees for filing a complaint.
- A web application for e-filing of consumer complaints named 'edaakhil.nic.in' has been developed by NIC for the purpose.
- E-filing was launched by the National Consumer Disputes Redressal Commission (NCDRC) on September 7, 2020.
- Delhi was the first state to implement it on September 8, 2020.

#### Features of the Portal:

- The E-Daakhil portal empowers the consumer and their advocates to file the consumer complaints along with payment of requisite fees online from anywhere for the redressal of their complaints.
- It facilitates the consumer commissions to scrutinise the complaints online to accept, reject or forward the complaint to the concerned commission for further processing.
- The digital software for filing consumer complaints has many features like e-notice, case document download link and virtual hearing link, filing written response by the opposite party, filing rejoinder by complainant and alerts via SMS/e-mail.
- To facilitate the rural consumers for e-filing, it has been decided to integrate the common service centres (CSC) with the E-Daakhil portal.

### 2. NITI Aayog Proposes Revisions to National Food Security Act

#### Why in News?

- The NITI Aayog has recently proposed a revision in the National Food Security Act (NFSA), 2013 for lowering the coverage of both rural and urban population to save up to Rs 47,229 Crore Annually.

## National Food Security (NFS) Act:

- The NFS Act, 2013 aims to provide subsidized food grains to approximately two-thirds of India's 1.2 billion people.
- It was signed into law on 12 September 2013, retroactive to 5 July 2013.
- It converts into legal entitlements for existing food security programmes of the GoI.
- It includes the Midday Meal Scheme, Integrated Child Development Services (ICDS) scheme and the Public Distribution System (PDS).
- Further, the NFS 2013 recognizes maternity entitlements.
- The Midday Meal Scheme and the ICDS are universal in nature whereas the PDS will reach about two-thirds of the population (75% in rural areas and 50% in urban areas).
- Pregnant women, lactating mothers, and certain categories of children are eligible for daily free cereals.

## Key Provisions of NFSA:

- The NFSA provides a legal right to persons belonging to “eligible households” to receive foodgrains at a subsidised price.
- It includes rice at Rs 3/kg, wheat at Rs 2/kg and coarse grain at Rs 1/kg — under the Targeted Public Distribution System (TPDS).
- These are called central issue prices (CIPs).

## What has NITI Aayog Asked for Review?

- A revision of CIPs is one of the issues that have been discussed.
- The other issues are updating of the population covered under the NFSA, and beneficiary identification criteria.
- Under sub-section (1) of Section 3 of the Act, the term “eligible households” comprises two categories — “priority households”, and families covered by the Antyodaya Anna Yojana (AAY). Priority households are entitled to receive 5 kg of food grains per person per month, whereas AAY households are entitled to 35 kg per month at the same prices.

## Provisions for Review:

- Under Schedule-I of the Act, these subsidised prices were fixed for “a period of three years from the date of commencement of the Act”.
- While different states began implementing the Act at different dates, the deemed date of its coming into effect is July 5, 2013, and the three-year period was therefore completed on July 5, 2016.

- However, the Government has yet not Revised Subsidised Prices.
- The government can do so under Schedule-I of the Act, after completion of the three-year period. To revise the prices, the government can amend Schedule-I through a notification, a copy of which has to be laid before each House of Parliament as soon as possible after it is issued.
- The revised prices cannot exceed the minimum support price for wheat and coarse grains, and the derived minimum support price for rice.

### The Question of Coverage:

- The Act has prescribed the coverage under “eligible households” – 75% of the rural population and up to 50% of the urban population.
- On the basis of Census 2011 figures and the national rural and urban coverage ratios, 81.35 crore persons are covered under NFSA currently.
- This overall figure has been divided among the states and UTs, based on the NSSO Household Consumer Expenditure Survey 2011-12.
- Section 9 of the Act deals with an update of coverage of the population under the Act.
- However, given the population increase since then, there have been demands from the states and union territories to update the list by ensuring an annual updating system under NFSA.

### Propositions by NITI Aayog:

- The NITI Aayog has suggested that the national rural and urban coverage ratio be reduced from the existing 75-50 to 60-40.
- If this reduction happens, the number of beneficiaries under the NFSA will drop to 71.62 crores (on the basis of the projected population in 2020).
- To make these changes in the law, the government will have to amend sub-section (2) of Section 3 of the NFSA. For this, it will require parliamentary approval.

### Implications of the Move:

- If the national coverage ratio is revised downward, the Centre can save up to Rs 47,229 crore (as estimated by the NITI Aayog paper).
- On the other hand, if the rural-urban coverage ratio remains at 75-50, then the total number of people covered will increase from the existing 81.35 crores to 89.52 crore –an increase of 8.17 crore.
- This estimate by the NITI Aayog is based on the projected 2020 population, and, according to the paper, will result in an additional subsidy requirement of Rs 14,800 crore.

### 3. Sub-Mission on Agroforestry (SMAF) Scheme

#### Why in News?

- MoU between the Ministry of Agriculture and Farmers' Welfare and the Central Silk Board on a convergence model for the implementation of Agroforestry in the silk sector under the ongoing Sub-Mission on Agroforestry (SMAF) Scheme.

#### Highlights:

- The signing of this MoU aims to incentivize the farmers to take up sericulture-based Agroforestry models thereby contributing to the Make in India and Make for the World vision of the Prime Minister.
- This linkage will add another dimension to agroforestry for faster returns to the growers as well as support the production of the range of silks that India is famous for.
- The Central Silk Board will act as a catalyst to promote Agroforestry in the silk sector.

#### Sub-Mission on Agroforestry (SMAF):

- This scheme has been implemented since 2016-16 as part of the recommendation of the National Agroforestry Policy 2014.
- It is implemented by the Department of Agriculture, Cooperation and Farmers' Welfare in 20 states and 2 UTs.
- This sub-mission is under the National Mission for Sustainable Agriculture (NMSA).
- SMAF aims to encourage farmers to plant multi-purpose trees together with the agriculture crops for:
  - ✓ Climate resilience
  - ✓ Additional source of income to the farmers
  - ✓ Enhanced feedstock to inter alia wood-based and herbal industry
- Hence, there is a concerted effort to include medicinal, fruits, fodder, tree-borne oilseeds, lac host, etc. in addition to the longer rotation timber species.
- This is especially targeted for augmentation of sericulture host plants e.g. Mulberry, Asan, Arjuna, Som, Soalu, Kesseru, BadaKesseru, Phanat, etc. to be cultivated both as block plantations and border or Peripheral Plantations on Farmlands.

#### Significance:

- Planting sericulture-based tree species on the farm bunds and rearing silkworms has the potential of creating Additional Income Opportunities for Farmers.



### **SMAF Objectives:**

- To encourage and expand tree plantation in a complementary and integrated manner with crops and livestock to improve productivity, employment opportunities, income generation and livelihoods of rural households, especially the small farmers.
- To ensure the availability of quality planting material like seeds, seedlings, clones, hybrids, improved varieties, etc.
- To popularise various Agroforestry practices/models suitable for different agro-ecological regions and land use conditions.
- To create database, information and knowledge support in the area of agroforestry.
- To provide extension and capacity building support to the Agroforestry Sector.

## **4. Digitising India's healthcare**

### **Why in News?**

- As India seeks to create digital health infrastructure, it must consider several issues.

### **Integrated Digital Health Infrastructure:**

- The National Digital Health Mission aims to develop the backbone needed for the integrated digital health infrastructure of India.
- This can help not only with diagnostics and management of health episodes, but also with broader public health monitoring, socio-economic studies, epidemiology, research, prioritising resource allocation and policy interventions.
- However, before we start designing databases and APIs and drafting laws, we must be mindful of Certain Considerations for Design Choices and policies to achieve the desired Social Objectives.

### **Factors to be considered:**

- **Carefully developing pathway to public good**
  - ✓ There must be a careful examination of how exactly digitisation may facilitate better diagnosis and management, and an understanding of the data structures required for effective epidemiology.
  - ✓ We must articulate how we may use digitisation and data to understand and alleviate health problems such as malnutrition and child stunting.
  - ✓ We need the precise data we require to better understand crucial maternal- and childcare-related problems.

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- **Balancing between Public Good and Individual Rights**

- ✓ The potential tensions between public good and individual rights must be examined, as must the suitable ways to navigate them.
- ✓ Moreover, for the balancing to be sound and for determining the level of due diligence required, it is imperative to clearly define the operational standards for privacy management.
- ✓ Conflating privacy with security, as is typical in careless approaches, will invariably lead to problematic solutions.
- ✓ In fact, most attempts at building health data infrastructures worldwide — including in the UK, Sweden, Australia, the US and several other countries — have led to serious privacy-related controversies and have not yet been completely successful.

- **Managing the sector specific identities**

- ◆ Even if we define and use a sector-specific identity, the question of when and how to link it with that of other sectors remains.
- ◆ For example, with banking or insurance for financial transactions, or with welfare and education for transactions and analytics.
- ◆ Indiscriminate linking may break silos and create a digital panopticon, whereas not linking at all will result in not realising the full powers of data analytics and inference.

#### 4) Working out the operational requirement of data infrastructure

- ◆ We need to work out the operational requirements of the data infrastructure in ways that are informed by, and consonant with, the previous points.
- ◆ In other words, the design of the operationalisation elements must follow the deliberations on above points, and not run ahead of them.
- ◆ This requires identifying the diverse data sources and their complexity — which may include immunisation records, birth and death records, informal health care workers, dispensaries etc.
- ◆ It also requires an understanding of their frequency of generation, error models, access rights, interoperability, sharing and other operational requirements.
- ◆ There also are the complex issues of research and non-profit uses of data, and of data economics for private sector medical research.

#### 5) Issue of due process

- ◆ Finally, “due process” has always been a weak point in India, particularly for technological interventions.

- Building an effective system that can engender people's trust not only requires managing the floor of the Parliament and passing a just and proportional law, but also building a transparent process of design and refinement through openness and public consultations.
- In particular, technologists and technocrats should take care to not define "public good" as what they can conveniently deliver, and instead understand what is actually required.
- While we can understand the urge to move forward quickly, given the urgent need to improve health outcomes in the country, deliberate care is needed.

## 5. National Social Assistance Programme (NSAP)

### Why in News?

- The Parliamentary Standing Committee on Rural Development has slammed the Centre's meagre Pension Allocations under National Social Assistance Programme (NSAP).

### What did the New Report Flag?

- The panel slammed the government's laxity in raising the amount, pointing out the recommendations to increase the sums.
- It observed the meagre amount of assistance ranging from ₹200 to ₹500 per month under the different components of this Scheme.
- The panel also flagged delays and statewide disparities in the payment of wages and unemployment allowances under the flagship MGNREGA scheme.

### NSAP:

- NSAP is a Centrally Sponsored Scheme of the GoI that provides financial assistance to the elderly, widows and persons with disabilities in the form of social pensions.
- It was launched on 15th August 1995.
- The scheme represents a significant step towards the fulfilment of the Directive Principles in Article 41.
- Article 41 of the Constitution of India directs the State to provide public assistance to its citizens in case of unemployment, old age, sickness and disablement.
- For getting benefits under NSAP the applicant must belong to a Below Poverty Line (BPL) Family.

### Components of NSAP:

- The NSAP at its inception in 1995 had three components namely
  - ✓ National Old Age Pension Scheme (NOAPS,

- ✓ National Family Benefit Scheme (NFBS) and
- ✓ National Maternity Benefit Scheme (NMBS).
- The NMBS was subsequently transferred on 1st April 2001 from the Ministry of Rural Development to the Ministry of Health and Family Welfare.
- On 1st April 2000, a new Scheme known as Annapurna Scheme was launched.
- In February 2009, two new Schemes are known as Indira Gandhi National Widow Pension Scheme (IGNWPS) and Indira Gandhi National Disability Pension Scheme (IGNDPS) were introduced.
- Presently NSAP comprises of five schemes, namely –
  - ✓ Indira Gandhi National Old Age Pension Scheme (IGNOAPS)
  - ✓ Indira Gandhi National Widow Pension Scheme (IGNWPS)
  - ✓ Indira Gandhi National Disability Pension Scheme (IGNDPS)
  - ✓ National Family Benefit Scheme NFBS) and
  - ✓ Annapurna

## 6. SDG India Index, 2021

### Why in News?

- The third rendition of India's Sustainable Development Goals (SDG) Index will be launched by NITI Aayog today.

### SDG India Index:

- The index measures the progress at the national and sub-national level in the country's journey towards meeting the Global Goals and targets.
- It has been successful as an advocacy tool to propagate the messages of sustainability, resilience, and partnerships, as well.
- From covering 13 Goals, 39 targets, and 62 indicators in the first edition in 2018-19 to 17 Goals, 54 targets and 100 indicators in the second; this third edition of the index covers 17 Goals, 70 targets, and 115 indicators.

### Aims and objectives:

- The construction of the index and the ensuing methodology embodies the central objectives of measuring the performance of States and UTs on the SDGs and ranking them.
- It aims at supporting States and UTs in identifying areas which require more attention; and promoting healthy competition among them.

## Methodology and Process:

- The index estimation is based on data on indicators for the first 16 goals, with a qualitative assessment for Goal 17.
- The technical process of target setting and normalization of scores follow the globally established methodology.
- While target setting enables the measurement of the distance from the target for each indicator, the process of normalization of positive and negative indicators allows for comparability and estimation of goal wise scores.
- The composite score of a State is derived by assigning each goal the same weight, keeping in mind the indivisible nature of the 2030 Agenda.
- The selection of indicators is preceded by a consultative process undertaken in close coordination with MoSPI, Union Ministries and stakeholders from States and UTs.

## Significance:

- The index represents the articulation of the comprehensive nature of the Global Goals under the 2030 Agenda while being attuned to the national priorities.
- The modular nature of the index has become a policy tool and a ready reckoner for gauging the progress of States and UTs on the nature of goals including health, education, gender, Economic Growth and Climate Change and the Environment.

## 7. Come out with 'rule curve' for Mullaperiyar: SC

### Why in News?

- The Supreme Court said that the Tamil Nadu Chief Secretary will be personally responsible and appropriate action will be taken on failure to give information on the rule curve for the Mullaperiyar dam to the Supreme Court-appointed Supervisory Committee.

### Highlights:

- The court directed the Supervisory Committee to issue directions or take steps to address the three core safety issues and submit a compliance report.
- The monitoring and performance of the instrumentation of the dam
- Finalising the rule curve
- Fixing the Gate Operating Schedule

### Rule Curve:

- The rule curve in a dam decides the fluctuating storage levels in a reservoir.

- The gate opening schedule of a dam is based on the rule curve.
- It is part of the “core safety” Mechanism in a dam.

### **Mullaperiyar Dam:**

- The Mullaperiyar Dam is a masonry gravity dam on the Periyar River in the Indian state of Kerala.
- The dam is located in Kerala on the river Periyar, but is operated and maintained by Tamil Nadu state.
- The dispute between Kerala and Tamil Nadu states is because of the control and safety of the dam and the validity and fairness of the lease agreement.
- The dispute began in 1998 when Tamil Nadu wanted to raise the height of the water level and Kerala opposed it.

## **8. Rajya Sabha passes Bill to raise FDI limit in insurance sector**

### **Why in News?**

- The Rajya Sabha passed the Insurance Amendment Bill, 2021. The bill will be sent to the Lok Sabha for approval.
- The bill increases the maximum foreign investment allowed in an insurance company from 49% to 74%.

### **Criticisms:**

- Opposition parties raised concerns about the clause enabling “control and ownership” by foreign investors.
- It was pointed out that big insurance firms were not in shortage of capital and that the Bill differed from the government motto of “Atmanirbhar Bharat”.
- It was highlighted that the insurance firms had managed to get FDI even up to the present limit of 49%. Justification to increase the limit was also sought.

### **Details:**

- The Finance Minister assured that the policy holder’s money would not leave Indian shores and have to be compulsorily invested here. It was argued that more FDI would mean greater competition and thus better-negotiated premiums for the end-user.
- Under the new structure, the majority of directors on the board and key management persons would be resident Indians, with at least 50% of directors being independent directors.

- It was highlighted that the key management personnel would have to be Indians and therefore would be governed by Indian laws.
- The increase in FDI limit is expected to encourage foreign insurers to bring more capital into the country which has a huge potential for growth in the sector.

## 9. Justice NV Ramana set to take over as 48th CJI

### Why in News?

- The Chief Justice of India Sharad Bobde has recommended Justice N.V. Ramana, the senior-most judge of the Supreme Court, as the next top judge from April 24.

### Chief Justice of India:

- The CJI is the chief judge of the Supreme Court of India as well as the highest-ranking officer of the Indian Federal Judiciary.

### Appointment:

- The Constitution of India grants power to the President to nominate, and with the advice and consent of the Parliament, appoint a chief justice, who serves until they reach the age of 65 or until removed by impeachment.
- Earlier, it was a convention to appoint seniormost judges.
- However, this has been broken twice. In 1973, Justice A. N. Ray was appointed superseding 3 senior judges.
- Also, in 1977 Justice Mirza Hameedullah Beg was appointed as the chief justice superseding Justice Hans Raj Khanna.

### Qualifications to be a SC Judge:

- The Indian Constitution says in Article 124 (3) that in order to be appointed as a judge in the Supreme Court of India, the person has to fit in the following criteria:
  - ✓ He/She is a citizen of India and
  - ✓ has been for at least five years a Judge of a High Court or of two or more such Courts in succession; or
  - ✓ has been for at least ten years an advocate of a High Court or of two or more such Courts in succession; or is, in the opinion of the President, a distinguished jurist

### Functions:

- As head of the Supreme Court, the CJI is responsible for the allocation of cases and appointment of constitutional benches which deal with important matters of law.

- In accordance with Article 145 of the Constitution and the Supreme Court Rules of Procedure of 1966, the chief justice allocates all work to the other judges.
- On the administrative side, the CJI carries out the following functions:
- maintenance of the roster; appointment of court officials and general and miscellaneous matters relating to the supervision and functioning of the Supreme Court

### Removal:

- Article 124(4) of the Constitution lays down the procedure for removal of a judge of the Supreme Court which is applicable to chief justices as well.
- Once appointed, the chief justice remains in the office until the age of 65 years. He can be removed only through a process of removal by Parliament as follows:
- He/She can be removed by an order of the President passed after an address by each House of Parliament supported by a majority of the total membership of that House and by a majority of not less than two-thirds of the members of that House present.
- The voting has been presented to the President in the same session for such removal on the ground of proved misbehaviour or incapacity.

## 10. Mission Karmayogi

### Why in News?

- The Union Minister of Personnel, Public Grievances & Pensions has informed about the Mission Karmayogi to Parliament.

### Mission Karmayogi:

- The mission is established under the National Programme for Civil Services Capacity Building (NPCSCB).
- It is aimed at building a future-ready civil service with the right attitude, skills and knowledge, aligned to the vision of New India.
- It is meant to be a comprehensive post-recruitment reform of the Centre's human resource development, in much the same way as the National Recruitment Agency approved last week is pre-recruitment reform.

### Why such a mission?

- The capacity of Civil Services plays a vital role in rendering a wide variety of services, implementing welfare Programs and Performing core Governance Functions.



## Major Undertakings of the Scheme:

- The scheme will cover 46 lakh, Central government employees, at all levels, and involve an outlay of ₹510 crores over a five-year period, according to an official statement.
- The programme will support a transition from “rules-based to roles-based” HR management so that work allocations can be done by matching an official’s competencies to the requirements of the post.
- Apart from domain knowledge training, the scheme will focus on “functional and behavioural competencies” as well, and also includes a monitoring framework for performance evaluations.
- Eventually, service matters such as confirmation after the probation period, deployment, work assignments and notification of vacancies will all be integrated into the proposed framework.
- The capacity building will be delivered through the iGOT Karmayogi digital platform, with content drawn from global best practices rooted in Indian national ethos.

## Apex bodies under the Mission:

- The Prime Minister’s Public Human Resource Council will be set up as the apex body to direct the reforms.
- There will be an Autonomous Capacity Building Commission to be established to manage the reformed system and harmonize training standards across the country so that there is a common understanding of India’s aspirations and development goals.
- A wholly government-owned, not-for-profit special purpose vehicle will be set up to own and operate the digital platform and its content.

## 11.40% of RTI Rejections did not cite Valid Reason, Says Analysis

### Why in News?

- Central Information Commission’s annual report on Right to Information (RTI) requests.

### Highlights:

- The CIC’s annual report covers more than 2,000 public authorities across the Central government as well as the union territories.
- An analysis of CIC macro-data from Central ministries shows that the Home Ministry had the highest rate of rejections, as it rejected 20% of all RTIs received. The Agriculture Ministry’s rejection rate doubled from 2% in 2018-19 to 4% in 2019-20. The Delhi Police and the Army also saw increases in rejection rates.

- The Centre has only rejected 4.3% of all Right to Information (RTI) requests in 2019-20, the lowest ever rate.
- However, almost 40% of these rejections did not include any valid reason, as they did not invoke one of the permissible exemption clauses in the RTI Act.
- This includes 90% of rejections by the Prime Minister's Office.
- In 38.7% of rejections in 2019-20, public authorities failed to cite permissible exemption clauses, and were classified under the 'Others' category in the CIC data. This is an increase from the 33% seen the previous year.

### RTI Act:

- The Right To Information Act is one of the most important acts which empowers ordinary citizens to question the government and its working.
- This has been widely used by citizens and media to uncover corruption, progress in government work, expenses related information, etc.
- The RTI Act allows public authorities to reject RTI requests on a number of grounds, ranging from information that would endanger life and safety to that which involves irrelevant personal information, Cabinet papers, foreign governments, copyrights, or sovereignty, security and intelligence matters.
- Public authorities are expected to cite the relevant clause of the Act to invoke the Exemption.

## 12. Election Commission's New Rule for Polling Agents

### Why in News?

- The Election Commission's recent decision to change the rules for appointing polling agents has sparked off a debate in West Bengal.

### Who is a Polling Agent?

- A polling agent is a person appointed as a representative of a political party as it is not possible for a candidate to be physically present at every polling booth on the day of the elections.
- Therefore, the Election Commission allows a candidate to appoint a polling agent who keeps an eye on the voting process.

### What is his/her role?

- As per the EC's rules, a polling agent should be familiar with the rules and procedures to conduct elections using EVMs and VVPATs, and with the working of these machines.

- 
- Towards this end, a polling agent attends the demonstrations arranged by the Returning Officer, where the functioning and operation of these machines are explained.

### How were they Appointed Earlier?

- As per the earlier practice, polling agents had to be voters of the same polling stations or at least the neighbouring polling stations of the booth where she has been posted at.

### What does the New Rule Say?

- The ECI, revising the rule, has allowed a party to nominate a polling agent for any booth within the assembly segment where the person is an electorate of.
- So, any voter from within an Assembly Constituency can be a polling agent of any booth within that Constituency.

### Issues with the Rule

- The political parties are opposing the change in rules, calling it “arbitrary, motivated and biased”.
- They have also written to the Election Commission seeking withdrawal of the order.

### What is the EC's stand?

- The poll body has defended the change in a rule saying that the new norms have been formulated so that every political party gets to appoint polling agents.
- It is difficult to convince people to sit at the booths amid the Covid-19 pandemic.

## 3. SCIENCE & TECHNOLOGY

### 1. Fifth Science Policy

#### Why in News?

- From the report published by the National Science Foundation of the U.S. in December 2019, India was the third-largest publisher of peer-reviewed science and engineering journal articles and conference papers, with 135,788 articles in 2018.
- This milestone was achieved through an average yearly growth rate of 10.73% from 2008, which was greater than China's 7.81%.

#### Highlights:

- Scientific publication from India and issues with it
  - ✓ China and the United States had about thrice and twice the number, respectively, of India's publications.
  - ✓ Also, the publications from India are not impactful.
  - ✓ From the report, in the top 1% of the most cited publications from 2016 (called HCA, or Highly Cited Articles), India's index score of 0.7 is lower than that of the U.S., China and the European Union.
  - ✓ An index score of 1 or more is considered good.
  - ✓ The inference for India is that the impact, and hence the citation of publications from India, should improve.

#### Patents Filed by India:

- The World Intellectual Property Organization (WIPO) through their Patent Cooperation Treaty (PCT) is the primary channel of filing international patent applications.
- In its report for 2019, WIPO says India filed a modest number of 2,053 patent applications.
- Compared to the 58,990 applications filed by China and 57,840 by the U.S., India has a long way to go.
- The Indian Government put in place the National Intellectual Property Rights (IPR) Policy in 2016 to "stimulate a dynamic, vibrant and balanced intellectual property rights system".
- One of the objectives is human capital development.
- The mission to foster innovation, replicate it at scale and commercialise it is a work in progress consequent to the policy.

## India's Science Policies:

- There have been four science policies till now, after 1947, with the draft of the fifth policy having been released recently.
- India's first science policy adopted in 1958.
- It led to the establishment of many research institutes and national laboratories, and by 1980.
- The focus in the second science policy, Technology Policy Statement, in 1983, was technological self-reliance and to use technology to benefit all sections of the society.
- The Science and Technology Policy 2003, the first science policy after the economic liberalisation of 1991, aimed to increase investment in research and development and brought it to 0.7%.
- The Scientific and Engineering Research Board (SERB) was established to promote research.
- In 2013, India's science policy included Innovation in its scope and was called Science, Technology and Innovation Policy.
- The focus was to be one of the top five global scientific leaders, which India achieved.

## What 5<sup>th</sup> science Policy Seeks to Achieve:

- The draft of the Science, Technology and Innovation Policy 2020 (STIP2020) has an ambitious vision to “double the number of full-time equivalent (FTE) researchers, Gross Domestic Expenditure on R&D (GERD) and private sector contribution to the GERD every 5 years” .
- It also aims to “position India among the top three scientific superpowers in the next decade”.
- It also defines strategies to improve funding for and participation in research. India's Gross Domestic Expenditure on R&D (GERD) is currently around 0.6% of GDP.
- This is quite low when compared to the investments by the U.S. and China which are greater than 2% and Israel's GERD is more than 4%.
- The policy seeks to define strategies that are “decentralized, evidence-informed, bottom-up, experts-driven, and inclusive”.

## Solutions to Improve Funding

- STIP2020 defines solutions to improve funding thus: all States to fund research, multinational corporations to participate in research, fiscal incentives and support for innovation in medium and small-scale enterprises.

- The new measures should not become a pretext to absolve the Union and State governments of their primacy in funding research; the government should invest more into research.
- Other critical focus areas:
  1. Other critical focal areas are inclusion of under-represented groups of people in research.
  2. Support for indigenous knowledge systems.
  3. Using artificial intelligence.
  4. Reaching out to the Indian scientific diaspora for collaboration.
  5. Science diplomacy with partner countries.
  6. Setting up a strategic technology development fund to give impetus to research.

## 2. Species in News: Caracal

### Why in News?

- The National Board for Wildlife (NBWL) and MoEFCC last month included the caracal, a medium-sized wildcat found in parts of Rajasthan and Gujarat, in the list of critically endangered species under the Species Recovery Programme.



### Caracal in India:

- **IUCN status:** Least Concerned
- The wildcat has long legs, a short face, long canine teeth, and distinctive ears — long and pointy, with tufts of black hair at their tips.
- The iconic ears are what give the animal its name — caracal comes from the Turkish karakulak, meaning ‘black ears’.
- In India, it is called siya gosh, a Persian name that translates as ‘black Ear’.
- A Sanskrit fable exists about a small wild cat named deergha-karn or ‘long-eared’.
- While it flourishes in parts of Africa, its numbers in Asia are declining.

### In History and Myth:

- The earliest evidence of the caracal in the subcontinent comes from a fossil dating back to the civilization of the Indus Valley c. 3000-2000 BC.
- The caracal has traditionally been valued for its litheness and extraordinary ability to catch birds in flight; it was a favourite coursing or hunting animal in medieval India.

- Firuz Shah Tughlaq (1351-88) had siyah-goshdar khana, stables that housed large numbers of coursing caracal.
- It finds mention in Abul Fazl's Akbarnama, like a hunting animal in the time of Akbar (1556-1605).
- Descriptions and illustrations of the caracal can be found in medieval texts such as the Anvar-i-Suhayli, Tutinama, Khamsa-e-Nizami, and Shahnameh.
- The East India Company's Robert Clive is said to have been presented with a caracal after he defeated Siraj-ud-daullah in the Battle of Plassey (1757).

### 3. Technology and Innovation Report, 2021

#### Why in News?

- According to UNCTAD's Technology and Innovation Report 2021, India is the greatest outperformer among developing countries to use, adopt and adapt frontier technologies than their per capita GDPs.

#### Technology and Innovation Report, 2021:

- The report critically examines the possibility of frontier technologies such as AI, robotics, and gene-editing widening existing inequalities and creating new ones.

#### Forging ahead at the digital frontiers

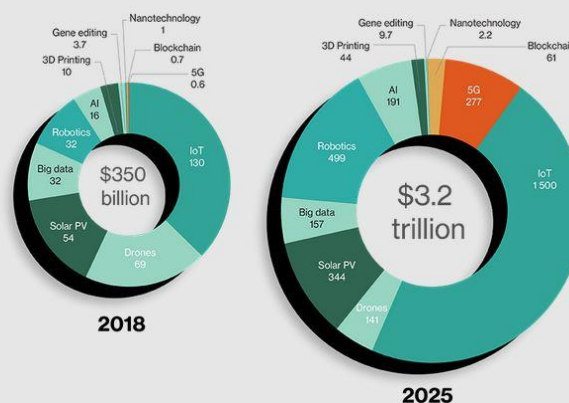
This report covers 11 frontier technologies:



As a group, these 11 technologies already represent a \$350-billion market, which by 2025 could grow to over \$3.2 trillion

Only a few countries currently create frontier technologies, but all countries need to prepare for them. To assess national capabilities to equitably use, adopt and adapt these technologies the Technology and Innovation report 2021 has developed a 'readiness index.' The index comprises five building blocks: ICT deployment, skills, R&D activity, industry activity and access to finance.

In general, the economies most ready are in Northern America and Europe while those least ready are in sub-Saharan Africa.



#### What are Frontier technologies?

- Frontier technologies include AI, IoT, big data, blockchain, fifth-generation mobile telephony, 3D printing, robotics, drones, gene-editing, nanotechnology, and solar power — the ones that take advantage of digitalization and connectivity.

- Frontier technologies are essential for sustainable development, but they also could accentuate initial inequalities.

### Country-Readiness Index:

- The country-readiness index released by the United Nations Conference on Trade and Development (UNCTAD) under this report.
- The index analysed the progress of countries in using frontier technologies, considering their national capacities related to physical investment, human capital, and technological effort.

### India's Performance:

- India's actual index ranking was 43, while the estimated one based on per capita income was 108.
- This meant that India overperformed other countries by 65 ranking positions.
- It was followed by the Philippines, which overperformed by 57 ranking positions.

### Global Performance:

- China was at position 25; both India and China performed well in research and development.
- This was reflective of their abundant supplies of qualified and highly skilled human resources available at a comparatively low cost.
- The Philippines has a high ranking for the industry—because of high levels of foreign direct investment in high-technology manufacturing, especially electronics.
- The United States, Switzerland, and the United Kingdom were “best prepared” for frontier technologies, the report highlighted.
- Most of the best-prepared countries are from Europe, except the Republic of Korea, Singapore, and the United States. Some transition economies, such as Russia, also perform well on the Index.

### Major Takeaways of the report:

- The report urges all developing nations to prepare for a period of deep and rapid technological change that will profoundly affect markets and societies.
- Developing countries should align science, technology, and innovation policies with industrial policies.
- New technologies can re-invigorate traditional production sectors and speed up industrialization and economic structural transformation.



- It is up to policymakers to reduce this risk and make frontier technologies contribute to increasing equality, says the report.
- Low-and middle-income developing countries and the least developing countries cannot afford to miss the new wave of Rapid Technological Change.

#### 4. NASA-ISRO Synthetic Aperture Radar (NISAR)

##### Why in News?

- Indian Space Research Organisation (ISRO) has completed the development of a Synthetic Aperture Radar (SAR).

##### NASA-ISRO SAR:

- NISAR is a joint collaboration for a dual-frequency L and S-band SAR for earth observation.
- NASA and Bengaluru-headquartered ISRO signed a partnership on September 30, 2014, to collaborate on and launch NISAR.
- The mission is targeted to launch in early 2022 from ISRO's Sriharikota spaceport in Andhra Pradesh's Nellore district, about 100km north of Chennai.
- It is capable of producing extremely high-resolution images for a joint earth observation satellite mission with NASA.
- It will be the first satellite mission to use two different radar frequencies (L-band and S-band) to measure changes in our planet's surface less than a centimetre across.

##### Objectives of the NISAR:

- NISAR will observe Earth's land and ice-covered surfaces globally with 12-day regularity on ascending and descending passes, sampling Earth on average every six days for a baseline three-year mission.
- It will measure Earth's changing ecosystems, dynamic surfaces and ice masses, providing information about biomass, natural hazards, sea-level rise and groundwater, and will support a host of other applications.
- It would also provide data on natural hazards including earthquakes, tsunamis, volcanoes and landslides.

##### What are L and S Bands?

- L band waves are used for GPS units because they are able to penetrate clouds, fog, rain, storms, and vegetation.

- The S-band is used by airport surveillance radar for air traffic control, weather radar, surface ship radar, and some communications satellites, especially those used by NASA to communicate with the Space Shuttle and the International Space Station.
- NISAR uses a sophisticated information-processing technique known as SAR to produce extremely high-resolution images.
- Radar penetrates clouds and darkness, enabling NISAR to collect data day and night in any weather.

### What is Collaboration?

- NASA is providing the mission's L-band SAR, a high-rate communication subsystem for science data, GPS receivers, a solid-state recorder and payload data subsystem.
- ISRO is providing the spacecraft bus, the S-band radar, the launch vehicle and associated launch services for the mission, whose goal is to make global measurements of the causes and consequences of land surface changes using advanced radar imaging.

## 5. Genome Mapping of the Indian Ocean

### Why in News?

- A team of scientists and researchers from the National Institute of Oceanography (NIO) onboard its research vessel Sindhu Sadhana will work on a research project to reveal the Internal Working of the body of the ocean at a cellular level.

### Genome Mapping of the Indian Ocean:

- The first-of-its-kind research project in the country is aimed at understanding the biochemistry and the response of the ocean to climate change, nutrient stress and increasing pollution.
- The researchers will collect samples from various stretches of the ocean at an average depth of about 5 km.
- Just like gene mapping is carried out on blood samples collected from humans, the scientists will map these in the bacteria, microbes found in the ocean.
- The mapping of the Deoxyribonucleic acid (DNA) and Ribonucleic acid (RNA) will show the nutrients present in them, and also those lacking in different parts of the ocean.

### Objectives of the Mission:

- This project will help scientists understand the internal working of the ecosystem of the Indian Ocean.

- The research will enable scientists to identify the factors controlling the changes in RNA, DNA in the oceans, and various stressors impacting them.
- The ocean has several micronutrients like nitrates, sulphates and silicates, minerals like iron ore and zinc, and trace metals like cadmium or copper.
- The genome mapping will show the presence of which these microbes have adapted to, in addition to their reaction to atmospheric carbon dioxide.
- This will help in identifying which part of the ocean has a greater concentration of which mineral or element.
- Scientists will then use these as tracers to tackle the causative factors for excess or lack of a certain mineral or element and suggest possible solutions for their mitigation.
- In addition, the large pool of RNA, DNA library of the oceans will be utilized for using the Indian Ocean for human benefit in the future.

### Studying the interactions of trace metals

- Trace metals are the metals subset of trace elements; that is, metals normally present in small but measurable amounts in animal and plant cells.
- Trace metals like cadmium or copper are supplied to oceans via continental run-offs, atmospheric deposition, hydrothermal activities and continental shelf interaction.
- They are essential for ocean productivity for having a holistic understanding of nutrient cycling and productivity of the oceans.
- Isotopic forms of trace metals can be utilized to track the movement of water masses responsible for ocean circulation and as tools to study the biological, geochemical and ecosystem processes and food web analyses.

## 6. Lunar Polar Exploration (LUPEX) Mission

### Why in News?

- India and Japan are working together on a joint lunar polar exploration (LUPEX) mission that aims to send a lander and rover to the Moon's the South Pole around 2024.

### LUPEX Mission:

- The LUPEX is a robotic lunar mission concept by the Indian Space Research Organisation (ISRO) and Japan Aerospace Exploration Agency (JAXA).
- It would send a lunar rover and lander to explore the South Pole region of the Moon in 2024.

- JAXA is likely to provide the under-development H3 launch vehicle and the rover, while ISRO would be responsible for the lander.
- The mission concept has not yet been formally proposed for funding and planning.
- The Lunar Polar Exploration mission would demonstrate new surface exploration technologies related to vehicular transport and lunar night survival for sustainable lunar exploration in Polar Regions.

## 7. Martian 'Blueberries'

### Why in News?

- In 2004, NASA's Mars exploration rover 'Opportunity' found several small spheres on the planet, informally named Martian blueberries which find a resemblance to the similar formation in India's Kutch region.

### Martian Blueberries:

- Opportunity's mini spectrometers studied mineralogy and noted they were made of iron oxide compounds called haematites.
- This caused excitement, as the presence of haematites suggests that there was water present on Mars.
- The widely accepted formation mechanism of hematite concretion [hard solid mass] is precipitation from aqueous fluids.
- Hematite is known to form in oxidizing environments hence it can be inferred that water must have played a crucial role in the formation of grey hematite on Mars.

### What makes them So Special?

- Indian researchers have been studying hematite concretions in Kutch called the Jhuran formation.
- These formations are 145 and 201 million years old.
- Detailed geochemistry and spectroscopic investigations of the haematite concretions in this area revealed that they resemble the ones on Mars.
- They have similar morphology – spherical, often doublet and triplet – and similar mineralogy – a mixture of haematite and goethite.
- Hence, several types of research have shown that the Kutch area is a potential Martian analogue locality.

## 8. Responsible AI – the need for ethical guard rails

### Why in News?

- The article talks about the need for adequate safeguards while applying artificial intelligence (AI), failing which, social and economic schisms could be widened, leading to discriminatory outcomes.

### AI's Growth:

- The use of Artificial Intelligence has seen Exponential Growth.
- And the more AI is used, the more data is generated, and the smarter it gets.
- In just the last decade, AI has evolved with unprecedented velocity.
- Automation, big data and algorithms will continue to sweep into new corners of our lives.
- AI has immense potential. Just as electricity enabled us to radically alter virtually every aspect of existence, AI can leapfrog us toward eradicating hunger, poverty and disease — opening up new and unimaginable pathways for climate change mitigation, education and scientific discovery.

### AI's potential:

- AI has helped increase crop yields, raised business productivity, improved access to credit and made cancer detection faster and more precise.
- It could contribute more than \$15 trillion to the world economy by 2030 adding 14% to global GDP.
- Google has identified over 2,600 use cases of “AI for good” worldwide.
- A study reviewing the impact of AI on the Sustainable Development Goals (SDGs) finds that AI may act as an enabler on 79% of all SDG targets. On the flip side, it states that AI can actively hinder 35% of SDG targets.

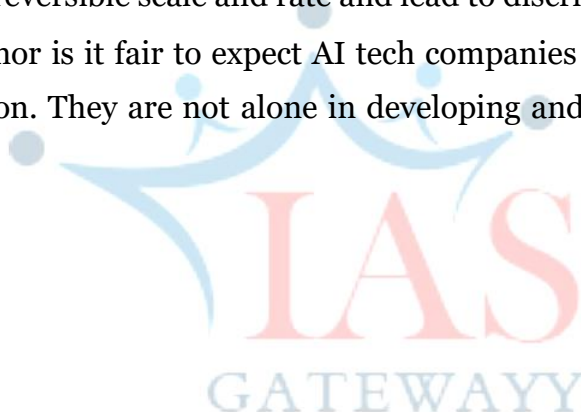
### Concerns:

- AI requires massive computational capacity, which means more power-hungry data centres and a big carbon footprint.
- Robotics and AI companies are building intelligent machines that perform tasks typically carried out by low-income workers, but the day is not far when many desk jobs will also be edged out by AI.
- Without clear policies on reskilling workers, the promise of new opportunities will in fact create serious new inequalities.

- 
- Investment is likely to shift to countries where AI-related work is already established, widening gaps among and within countries.
  - Without adequate safeguards, AI would exacerbate existing problems.
  - There have been AI facial recognition and surveillance technology discriminating against people of colour and minorities.
  - Also, an AI-enhanced recruitment engine, based on existing workforce profiles, taught itself that male candidates were preferable to female.
  - AI also presents serious data privacy concerns. The algorithm's never-ending quest for data has led to our digital footprints being harvested and sold without our knowledge or informed consent.

### **Need for Safeguards:**

- Without ethical guard rails, AI will widen social and economic schisms, amplifying any innate biases at an irreversible scale and rate and lead to discriminatory outcomes.
- It is neither enough nor is it fair to expect AI tech companies to solve all these challenges through self-regulation. They are not alone in developing and deploying AI; governments also do so.



## 4. ECONOMY

### 1. Nag River Pollution Abatement Project

#### Why in News?

- The Nag River Pollution Abatement Project has been approved at a cost of Rs. 2,117.54 crores.

#### Highlights:

- The Nag river, which flows through Nagpur city, thus giving its name to the city, is now a highly polluted water channel of sewage and industrial waste.
- The Nag River Pollution Abatement Project, approved under the National River Conservation Plan, will be implemented by the National River Conservation Directorate, NRCD.
- It will reduce the pollution level in terms of untreated sewage, flowing solid waste and other impurities flowing into the Nag river and its tributaries.

#### National River Conservation Directorate:

- The National River Conservation Directorate (NRCD) is implementing the Centrally Sponsored Schemes of National River Conservation Plan (NRCP) and National Plan for Conservation of Aquatic Eco-systems (NPCA) for the conservation of rivers, lakes and wetlands in the country.
- NRCD is under the Ministry of Environment, Forests and Climate Change.
- NRCD only provides financial assistance to the State Governments/local bodies to set up infrastructure for pollution abatement of rivers in identified polluted river stretches under the National River Conservation Plan (NRCP).
- The objective of the NRCP is to improve the water quality of the rivers, which are the major water sources in the country, through the implementation of pollution abatement works.

### 2. Central Revenues Control Laboratory (CRCL)

#### Why in News?

- ◆ Central Revenues Control Laboratory gets recognised as a Regional Customs Laboratory (RCL) of the World Customs Organisation.

#### Highlights:

- ◆ CRCL has been recognized as a Regional Customs Laboratory (RCL) of the World Customs Organisation (WCO) for Asia-Pacific Region.

- With its recognition as RCL, CRCL joins a select group of Customs Laboratories in the region like those in Japan & Korea.

### **CRCL:**

- Established in 1939, CRCL is the headquarters of 14 Revenue Laboratories, including 2 laboratories working at Government Opium & Alkaloid Works, Ghazipur & Neemuch.
- CRCL is a subordinate office under the control of the Central Board of Indirect Taxes and Customs, Department of Revenue, Ministry of Finance, GOI.
- Read more about the Central Board of Indirect Taxes and Customs (CBIC) in PIB dated Nov 7, 2019 under the headline, 'DIN System of CBIC'.
- Laboratories under the CRCL assist in the field formations in chemical analysis of samples of various trade commodities to enable appropriate assessment of duties.
- These laboratories also assist in the enforcement of Customs Act, NDPS Act, GST Laws, Central Excise Act and other allied Acts including for the purpose of environment protection, food safety, etc.

### **3. Issues with the Power Sector Reforms**

#### **Why in News?**

- The debt burden of discoms is estimated to touch 4.5 lakh crore by the end of 2020-21. This high level of debt underscores the need for reforms in the discoms. With this in view, RLRBSD has been launched by the Centre.

#### **Reforms-Linked, Result-Based Scheme for Distribution' (RLRBSD):**

- In her FY22 Budget speech, Finance Minister proposed Electricity (Amendment) Bill, 2021, which intends to delicense the distribution business, bring in competition, and give the consumer power to choose her supplier.
- She also unveiled the Rs 3 lakh crore electricity distribution reform programme to reduce losses and improve the efficiency of discoms.
- Against this background, the RLRBSD aims at helping discoms trim their electricity losses to 12-15% from the present level.
- The aggregate technical and commercial (AT&C) losses and shortfall in the average revenue realisation from the sale of electricity vis-a-vis the average cost of supply or the ACS-ARR gap, are major causes for losses of discoms.
- Accordingly, the scheme sets the target for both to be achieved by 2025.



- It also aims to gradually narrow the deficit between the cost of electricity and the price at which it is supplied to 'zero' by March 2025.
- It will also have a compulsory pre-paid and smart metering component to be implemented across the power supply chain, including in about 250 million households.

### **Funding for RLRBSD:**

- The Centre is expected to contribute around Rs 60,000 crore to the scheme's corpus.
- The rest may be raised from multilateral funding agencies such as ADB and World Bank (WB).
- The Centre's contribution will be met through the previous commitment of the ongoing schemes, viz. the Integrated Power Development Scheme (IPDS) and the Deen Dayal Upadhyaya Gram Jyoti Yojna (DDUGJY).
- The funds will be released subject to discoms meeting reform-related milestones.

### **Analysing RLRBSD against the context of UDAY:**

- Under UDAY, discoms were required to reduce AT&C losses from 20.7% during 2015-16 to 15% by 2018-19.
- During 2019-20, their AT&C losses were 18.9% against the 15% target for 2018-19.
- Further, they were to reduce the ACS-ARR gap from Rs 0.59 per unit during 2015-16 to 'zero' by 2018-19.
- The ACS-ARR gap during 2019-20, stood at Rs 0.42 per unit against target of 'zero' for 2018-19.
- Simultaneously, the government gave them a financial restructuring package (FRP).
- The FRP was nothing but a condoning of discoms' staggering debt of about Rs 4 lakh crore.
- Against this backdrop, aims of achieving those targets by 2025 under RLRBSD, which should have been achieved by 2018-19 under UDAY seems difficult.

### **3 factors that contribute to debt of discoms**

- At the root of persistent and increasing losses of discoms is the orders issued by state governments to sell electricity to some preferred consumers, viz. poor households and farmers.
- Electricity is supplied to these customers either at a fraction of the cost of purchase, transmission and distribution, or even free.
- On the units sold to these groups, discoms incur colossal under-recovery.
- This is aggravated by AT&C losses—most of it plain theft.

- Inflated tariff allowed to independent power plants (IPPs) under purchase agreements adds to the revenue shortfall.

## 4. Glycemic Index in Rice

### Why in News?

- The Union Minister of Agriculture and Farmers Welfare has provided some useful information about some indigenous varieties of rice.

### Indigenous Varieties of Rice:

- Indigenous varieties of rice are being promoted through varieties of programmes.
- 574 indigenous varieties of rice have been propagated and tested at more than 10,000 farmers' fields.
- Nutritional profiling of 300 selected rice varieties has been done for market linkage and better price to the farmers.
- Farmers are also being trained on conservation, improvement and use of traditional/indigenous varieties through participatory variety selection.
- Further, for access to seeds of these indigenous varieties, community seed banks have been established.

### Key Varieties:

- Lalat and Improved Lalat (GI value: 54) as Low GI
- Swarna, Sambha Mahsuri and Shaktiman (GI value <60) as intermediate GI have been identified
- There is no certification for GI (Glycemic Index) in rice in India.

### What is Glycemic Index (GI)?

- GI is a number from 0 to 100 assigned to food, with pure glucose arbitrarily given the value of 100, which represents the relative rise in the blood glucose level two hours after consuming that food.
- The GI of a specific food depends primarily on the quantity and type of carbohydrate it contains. But it is also affected by the amount of entrapment of the carbohydrate molecules within the food, the fat and protein content of the food, the number of organic acids (or their salts) in the food, and whether it is cooked and, if so, how it is cooked.
- A food is considered to have a low GI if it is 55 or less; high GI if 70 or more, and mid-range GI if 56 to 69.

## 5. Agriculture Voltage Technology

### Why in News?

- An Agri-voltaic system of 105 KW capacity has been developed by ICAR-Central Arid Zone Research Institute, Jodhpur.

### Agriculture Voltage Technology

- This technology can increase the income of farmers by the generation of electricity and growing cash crops simultaneously on the same piece of land.
- Under component-I of the KUSUM (Kisan Urja Suraksha Utthan Mahabhiyan) scheme, there is a provision for installation of the agri-voltaic system in farmers' fields with a capacity ranging from 500 KW to 2 MW.
- Moreover, the National Solar Energy Federation of India (NSEFI) has also documented 13 operational agri-voltaic systems in the country managed by different solar PV functionaries and public Institutes.

### KUSUM Scheme:

- The scheme aims to provide extra income to farmers, by giving them an option to sell additional power to the grid through solar power projects set up on their barren lands.
- It was announced in the Union Budget 2018-19.

### Component of KUSUM Scheme:

- The proposed scheme consists of three components:
- **Component-A:**
  - ✓ Renewable power plants of capacity 500 KW to 2 MW will be set up by individual farmers/ cooperatives/panchayats /farmer producer organisations (FPO) on their barren or cultivable lands.
  - ✓ The power generated will be purchased by the DISCOMs at Feed-in tariffs determined by respective SERC.
- **Component-B:**
  - ✓ Installation of 17.50 lakh standalone Solar Powered Agriculture Pumps.
  - ✓ Individual farmers will be supported to install standalone solar pumps of capacity up to 7.5 HP. Solar PV capacity in kW equal to the pump capacity in HP is allowed under the scheme.
- **Component-C:**
  - ✓ Solarization of 10 Lakh Grid-connected Solar Powered Agriculture Pumps is included in this component,

- ✓ Individual farmers will be supported to solarise pumps of capacity up to 7.5 HP.
- ✓ Solar PV capacity up to two times of pump capacity in kW is allowed under the scheme.
- ✓ The excess available energy will be sold to DISCOM.

## 6. AT1 Bonds

### Why in News?

- The decision of the Securities and Exchange Board of India (SEBI) to slap restrictions on mutual fund (MF) investments in additional tier-1 (AT1) bonds has raised a storm in the MF and banking sectors.

### What are AT1 Bonds?

- AT1 Bonds stand for additional tier-1 bonds. These are unsecured bonds that have perpetual tenure. In other words, the bonds have no maturity date.
- They have a call option, which can be used by the banks to buy these bonds back from investors.
- These bonds are typically used by banks to bolster their core or tier-1 capital.
- AT1 bonds are subordinate to all other debt and only senior to common equity.
- Mutual funds (MFs) are among the largest investors in perpetual debt instruments and hold over Rs 35,000 crore of the outstanding additional tier-I bond issuances of Rs 90,000 crore.

### What action has been taken by the Sebi Recently and why?

- In a recent circular, the Sebi told mutual funds to value these perpetual bonds as a 100-year instrument.
- This essentially means MFs have to make the assumption that these bonds would be redeemed in 100 years.
- The regulator also asked MFs to limit the ownership of the bonds to 10 per cent of the assets of a scheme.
- According to the Sebi, these instruments could be riskier than other debt instruments.

### How MFs will be Affected?

- Typically, MFs have treated the date of the call option on AT1 bonds as the maturity date.
- Now, if these bonds are treated as 100-year bonds, it raises the risk in these bonds as they become ultra long-term.

- This could also lead to volatility in the prices of these bonds as the risk increases the yields on these bonds rises.
- Bond yields and bond prices move in opposite directions and therefore, the higher yield will drive down the price of the bond, which in turn will lead to a decrease in the net asset value of MF schemes holding these bonds.
- Moreover, these bonds are not liquid and it will be difficult for MFs to sell these to meet redemption pressure.

### What's the Impact on Banks?

- AT1 bonds have emerged as the capital instrument of choice for state banks as they strive to shore up capital ratios.
- If there are restrictions on investments by mutual funds in such bonds, banks will find it tough to raise capital at a time when they need funds in the wake of the soaring bad assets.
- A major chunk of AT1 bonds is bought by Mutual Funds.

### Why has the Finance Ministry asked Sebi to review the decision?

- The FM has sought withdrawal of valuation norms for AT1 bonds as it might lead to mutual funds making losses and exiting from these bonds, affecting capital raising plans of PSU banks. The government doesn't want a disruption in the fund mobilization exercise of banks at a time when two PSU banks are on the privatization block.
- Banks are yet to receive the proposed capital injection in FY21 although they will need more capital to face the asset-quality challenges in the foreseeable future.
- Fitch's own estimate pegs the sector's capital requirement between \$15 billion-58 billion under various stress scenarios for the next two years, of which state banks account for the bulk.

## 7. The Cairn Tax Dispute

### Why in News?

- In December 2020, a three-member tribunal at the Permanent Court of Arbitration in the Netherlands ruled against India in its long-running tax dispute with the U.K.-based oil and gas company Cairn Energy.

### PCA Ruling against India:

- The tribunal ordered India to pay about \$1.4 billion to the company.
- Following this, Cairn Energy has successfully moved courts in five countries, including the US and the UK to recognise its claim as per the arbitration award.

- The Netherlands, France, and Canada are the other three countries.
- Such recognition by courts opens the door for Cairn Energy to seize assets of the Indian government in these jurisdictions by way of enforcing its claim, in case the latter doesn't pay its dues.

### **What is the Dispute About?**

- The dispute started in early 2014 when Indian tax authorities started questioning Cairn Energy requesting information on the group's reorganization in the financial year 2006-07.

### **Issue over the Tax Due:**

- This escalated, and by 2015, the authorities had sent the company a draft assessment order, assessing in the process that there was a principal tax amount of \$1.6 billion that was due.
- The year in reference, 2006-07, was one in which big corporate changes and developments took place in Cairn Energy.

### **Basis of the tax demand: Sale of Shares:**

- It was the year in which it not only undertook a corporate reorganization but also floated an Indian subsidiary, Cairn India, which in early 2007 got listed on the Indian Stock Market.
- Through the corporate reorganization process, Cairn Energy had transferred all of its India assets, which were until then held by nine subsidiaries in various countries, to the newly-formed Cairn India.
- But the tax authorities claimed that in the process of this reorganization, Cairn Energy had made capital gains worth ₹24,500 crores.
- This, the department asserted, was the basis of the Tax Demand.

### **Is this case similar to Vodafone's battle with the Government?**

- The Vodafone case in 2007 was triggered by Hong Kong's Hutchinson Telecommunications' sale of its stake in India's Hutchinson Essar to Vodafone based out of the Netherlands.
- The Hong Kong firm made a capital gain on this, which the Indian tax authorities deemed fit to tax.
- They held that Vodafone should have withheld the tax, and therefore imposed liability on it.

- The Supreme Court quashed the taxman’s demand that the sale of shares, in this case, would amount to transfer of a capital asset within the meaning of Section 2(14) of the Indian Income Tax Act”.

### **What Governs the Sale of Shares?**

- In the Union Budget of 2012, the Income Tax Act, 1961 was amended to make sure that even if a transfer of shares takes place outside India, such a transfer can be taxed.
- This was done when the value of those shares is based on assets in India. And this was applied retrospectively.

### **Cairn won over Retrospection:**

- The action against Cairn Energy was based on this move.
- India lost its arbitration case against Vodafone as well, with the government being asked to fork out around ₹80 crores.

### **What happened after the Tax Claims in the Cairn Energy Dispute?**

- After receiving a draft assessment order from the tax authorities, Cairn UK Holdings Ltd. appealed before the Income Tax Appellate Tribunal.
- The tribunal, while providing the company relief from back-dated interest demands, however, upheld the main tax demand.
- The company had initiated proceedings of arbitration under the U.K.-India bilateral investment treaty.
- But during this time, the government sold Cairn’s almost 5% holding and seized dividends totalling ₹1,140 crore due to it from those shareholdings and set off a ₹1,590-crore tax refund against the demand.

### **What was the Main Argument of Cairn Energy During the Arbitration?**

- The claimants, Cairn Energy and Cairn UK Holdings argued that till the amendment was made to tax retrospectively in 2012, there was no tax on indirect transfers.
- Indirect transfers here meant transfer by a non-resident of shares in non-Indian companies which indirectly held assets in India.
- The application of the 2012 amendments, they alleged, constituted “manifest breaches” of the U.K.-India bilateral Investment Treaty.

### **What was India’s Defence During the arbitration?**

- India’s counter to the main charge of Cairn Energy was that its 2006 transactions were taxable irrespective of the 2012 amendments.

- It argued that “Indian law has long permitted taxation where a transaction has a strong economic nexus with India”.
- It said even if it is retrospective, it is “valid and binding applying the longstanding constitutional, legislative and legal framework in which the claimants have invested”.

### **What did the Arbitration Tribunal Rule?**

- The tribunal said the tax demand violated the U.K.-India bilateral investment treaty.
- The tribunal said India “failed to accord Cairn Energy’s investments fair and equitable treatment” under the bilateral protection pact it had with the United Kingdom.
- It also ordered India to compensate Cairn Energy and its subsidiary for “the total harm suffered” as a result of the breaches of the treaty.

## **8. India should Abandon its Suspicion of Digital Currency**

### **Why in News?**

- The article discusses the advantages of central bank digital currency which could combine the advantages of both fiat Money and Cryptocurrency.

### **India’s suspicion of the Cryptocurrencies:**

- In 2018, the Reserve Bank of India prohibited regulated entities from providing services to anyone who deals with or settles trades in any virtual currency.
- This was effectively banning Bitcoin trading in the country.
- The Supreme Court lifted this restriction in 2020.
- There were rumours earlier this year that a new law was in the works that would make it a crime to possess, issue, mine, trade or transfer crypto assets in India.

### **Thinking of Digital Currencies as Asset not Currency:**

- There are concerns over the speculative nature of cryptocurrencies.
- There are also law enforcement concerns around how digital currencies make it hard for the police to track down criminals.
- One of the most important attributes of a currency is that it should be a stable store of value, and Bitcoin is anything but.
- To deal with this difficulty, it will be helpful to think of digital currencies as just another asset—the digital equivalent of a scarce commodity that, like gold, certain collectors prize.

### **Difference between working of banks and cryptocurrencies:**

- Our financial system relies on banks to record transactions.



- It is a ‘permissioned’ ledger system in that only trusted intermediaries-registered banks under the supervision of the central bank-can make changes to the ledgers to certify that a given transaction has been completed.
- Cryptocurrencies, on the other hand, are ‘permissionless’ systems that need no intermediary.
- Instead of a centralized ledger, transactions are recorded on a distributed database.
- A purely permissionless system has no need of banks.

### **Role of banks in Maintaining Financial Health:**

- Central banks are not just intermediaries managing the great big financial ledger of the country, they are responsible for its financial health.
- To perform this function, they need to be able to take money out of the system when required or put money back into economic circulation.
- None of this is possible in a purely Permissionless System.

### **Advantages of Digitally Native Currencies:**

- Digitally native currencies are programmable and capable of being incorporated into smart contracts, offering various opportunities for innovative digital solutions.
- Since they can be directly allotted to citizens who don’t have a bank account, they are ideal for financial inclusion.
- Being digitally auditable, transactions can be audited, reducing the scope for illicit activity.
- The challenge is one of integrating the best that digital currencies have to offer into the Traditional Financial Paradigm.

### **Central bank Digital Currencies as an Alternative**

- CBDCs are a completely re-engineered form of money that use a distributed ledger as their underlying technology layer, but are backed by suitable amounts of monetary reserves, just like normal fiat currency.
- Many countries have been toying with the idea of a central bank digital currency (CBDC).
- They are run by central banks along with select financial entities responsible for managing the distributed ledger.
- The best CBDCs will converge the best of both worlds—the programability and security of cryptocurrencies and the reserve-backed stability of fiat currency.
- Several countries are already testing this concept.

## 9. Re-evaluating Inflation Targeting

### Why in News?

- March 31<sup>st</sup> will mark the end of the term of monetary policy framework agreement between the Centre and the Reserve Bank of India (RBI) on inflation targeting.
- The given article evaluates the effectiveness of the monetary policy.

### Inflation Targeting:

- Inflation control is a legitimate objective of economic policy given the correlation between inflation and macro-economic stability.
- Inflation targeting is one of the many inflation control policies.
- Unlike the money-supply targeting policy of inflation control, inflation targeting method prescribes the use of the interest rate to target inflation. Given that the policy interest rate, is under the direct control of the central bank, this method is believed to be more effective than the monetarist approach.
- Though the inflation rate has remained within the prescribed band of 2% to 6% since 2016 and the RBI has succeeded in anchoring inflationary expectations, the available evidence and observed trends are not conclusive on the efficacy claimed for inflation targeting.

### Logical Vulnerabilities in the Assumed Model:

- The economic model that underlies inflation targeting revolves around the proposition that inflation reflects “overheating”, or economic activity at a level greater than the “natural” level of output, having been taken there by central banks that have kept interest rates too low, at a level lower than the “natural” rate of interest. This necessitates the need to raise the rate of interest (‘repo’ rate) to control inflation.
- Inflation in India entered the prescribed band of 2% to 6% two years before inflation targeting was adopted in 2016-17. In fact, inflation had fallen steadily since 2011-12, halving by 2015-16. This by itself suggests that there is a mechanism driving inflation other than what is imagined in inflation targeting.
- The decline in inflation has been mainly led by the relative price of food. The vagaries of the price of food are a major determinant in inflation rate and the adopted model fails to acknowledge this aspect.

### Impact of inflation targeting:

- Five variables namely growth, private investment, exports, non-performing assets (NPAs) of commercial banks, and employment would be analyzed here.

- The economy's trend rate of growth actually began to decline after 2010-11. This trend was observed despite falling inflation trend. It indicates that the sharply falling inflation could do nothing to revive growth, belying the proposition that low inflation is conducive to growth.
- The swing in the real interest rate of over 5 percentage points in 2013-14 was powered further in 2016, when inflation targeting was adopted, and could have contributed to a declining private investment rate. This indicates that the higher interest rates, the toolkit for inflation targeting, may have been harmful for private investment in the economy.
- Exports and employment rates have fared poorly since inflation targeting was adopted in 2016.
- It has long been recognised that a central bank focusing on inflation may lose control of financial stability. NPAs have grown since 2016, and the cases of IL&FS, PMC Bank, PNB and YES Bank are indicative of the poor management and malfeasance in the financial sector, given the excessive focus of the central bank on inflation targeting.

### Conclusion:

- Though Inflation control will always be relevant for macroeconomic stability, there is no conclusive evidence that the policy has worked in India as the presumed benefits of low inflation are yet to become evident.
- Infact inflation targeting may end up raising interest rates to higher and higher levels which bring out many negative impacts as discussed above, without lowering inflation.

## 10. Mines and Minerals (Development and Regulation) Amendment Bill, 2021

### Why in News?

- The coal and Mines Minister has introduced the Mines and Minerals (Development and Regulation) Amendment Bill, 2021 in Lok Sabha to streamline the renewal of the auction process for minerals and coal mining rights.

### MMDR Amendment Bill, 2021:

- The Bill seeks to amend the Mines and Minerals (Development and Regulation) Act, 1957. The Act regulates the mining sector in India.
- Removal of restriction on end-use of minerals
  - ✓ The Act empowers the central government to reserve any mine (other than coal, lignite, and atomic minerals) to be leased through an auction for a particular end-use (such as iron ore mine for a steel plant).

- ✓ Such mines are known as captive mines. The Bill provides that no mine will be reserved for particular end-use.
- Sale of minerals by captive mines
  - ✓ The Bill provides that captive mines (other than atomic minerals) may sell up to 50% of their annual mineral production in the open market after meeting their own needs.
  - ✓ The central government may increase this threshold through a notification. The lessee will have to pay additional charges for mineral sold in the open market.
- Auction by the central government in certain cases
  - ✓ Under the Act, states conduct the auction of mineral concessions (other than coal, lignite, and atomic minerals).
  - ✓ Mineral concessions include mining lease and prospecting license-cum-mining lease.
  - ✓ The Bill empowers the central government to specify a time period for completion of the auction process in consultation with the state government.
  - ✓ If the state government is unable to complete the auction process within this period, the auctions may be conducted by the central government.
- Transfer of statutory clearances
  - ✓ Upon expiry of a mining lease (other than coal, lignite, and atomic minerals), mines are leased to new persons through auction.
  - ✓ The statutory clearances issued to the previous lessee are transferred to the new lessee for a period of two years.
  - ✓ The new lessee is required to obtain fresh clearances within these two years.
  - ✓ The Bill replaces this provision and instead provides that transferred statutory clearances will be valid throughout the lease period of the new lessee.
- Allocation of mines with expired leases
  - ✓ The Bill adds that mines (other than coal, lignite, and atomic minerals), whose lease has expired, may be allocated to a government company in certain cases.
  - ✓ This will be applicable if the auction process for granting a new lease has not been completed, or the new lease has been terminated within a year of the auction.
  - ✓ The state government may grant a lease for such a mine to a government company for a period of up to 10 years or until the selection of a new lessee, whichever is earlier.
- Rights of certain existing concession holders
  - ✓ In 2015, the Act was amended to provide that mines will be leased through an auction process.
  - ✓ Existing concession holders and applicants have been provided with certain rights.

- ✓ The Bill provides that the right to obtain a prospecting license or a mining lease will lapse on the date of commencement of the 2021 Amendment Act.
- ✓ Such persons will be reimbursed for any expenditure incurred towards reconnaissance or prospecting operations.
- Extension of leases to government companies
  - ✓ The Act provides that the period of mining leases granted to government companies will be prescribed by the central government.
  - ✓ The Bill provides that the period of mining leases of government companies (other than leases granted through auction) may be extended on payment of additional amount prescribed in the Bill.
- Conditions for lapse of mining lease
  - ✓ The Act provides that a mining lease will lapse if the lessee: (i) is not able to start mining operations within two years of the grant of a lease, or (ii) has discontinued mining operations for a period of two years.
  - ✓ However, the lease will not lapse at the end of this period if a concession is provided by the state government upon an application by the lessee.
  - ✓ The Bill adds that the threshold period for lapse of the lease may be extended by the state government only once and up to one year.
- Non-exclusive reconnaissance permit
  - ✓ The Act provides for a non-exclusive reconnaissance permit (for minerals other than coal, lignite, and atomic minerals).
  - ✓ Reconnaissance means preliminary prospecting of a mineral through certain surveys.
  - ✓ The Bill removes the provision for this permit.

### Why Such a Move?

- The move would likely lead to greater transparency in the auction process.
- There is a perception that states governments may in some cases prefer some bidders, and try to delay or cancel mining rights if their preferred bidders do not win mining rights.
- Could the amendment face legal challenges?
- The amendment, if passed, was likely to face legal challenges particularly from state governments.
- If an act is passed in which any state government's discretionary power is taken away or their rights or benefits are infringed, it is likely to be challenged in the Supreme Court.

## 11. Emerging Crisis of Obtaining Helium in India

### Why in News?

- India imports helium for its needs and with the U.S. appearing set to cut off exports of helium since 2021, the Indian industry stands to lose out heavily.

### Helium on Earth:

- Helium is a chemical element with the symbol He and atomic number 2.
- It is a colourless, odourless, tasteless, non-toxic, inert, monatomic gas, the first in the noble gas group in the periodic table. Its boiling point is the lowest among all the elements.
- Its discovery:
- In 1906 a young Englishman by the name of Moris Travers arrived in Bangalore, to take up the position of the Director of Indian Institute of Science.
- Travers extracted helium in small quantity by heating up monazite sand abundantly available in Kerala beach, in a pioneering effort.
- Dutch physicist Kamerlingh Onnes liquefied Helium by cooling the gas to -270 degrees Celsius. It is known that Onnes collected helium gas from the springs of Bath in Baden Baden, Germany for his Liquefaction Experiment.

### Helium in India:

- India's Rajmahal volcanic basin is the storehouse of helium trapped for billions of years, since the very birth of our Earth from the Sun.
- At present, researchers are mapping the Rajmahal basin extensively for future exploration and Harnessing of Helium.

### Why India Needs Helium?

- Every year, India imports helium worth Rs 55,000 crores from the U.S. to meet its needs.
- Helium is used in medicine, scientific research, for blimp inflation, party balloons as well as having welding applications. It finds many applications, mainly in magnetic resonance imaging (MRI) scans, in rockets and in nuclear reactors.

### US Monopoly in Helium:

- The U.S. became the most important exporter of helium across the world.
- It was soon realized that the U.S. was also the biggest storehouse of helium.
- The US is now planning to switch off the export of helium from 2021.
- Qatar is a possible exporter but acute political and diplomatic wrangles have made Qatar unreliable.

## 1. GEOGRAPHY & ENVIRONMENT

### 1. Adaptation, not Mitigation, should inform India's Climate Strategy

#### Why in News?

- Countries Across the world are gearing up for the 26th Conference of Parties (COP) to the UN Framework Convention on Climate Change (UNFCCC).

#### The 26<sup>th</sup> COP to the UNFCCC:

- At the forthcoming COP countries will be expected to increase the nationally determined commitments they made as part of that agreement.
- Those original commitments would put the planet on track towards a 3 degrees centigrade temperature rise by the end of the current millennium.
- 3-degree centigrade is far beyond the 1.5-degree limit that science considers to be a relatively safe threshold.

#### Countries Declaring Carbon Neutrality Targets:

- The European Union (EU), the UK, Japan and South Korea have announced more ambitious targets.
- The EU and the UK have pledged to reduce their carbon emissions by 55 per cent in 2030 with 2000 as the base year
- They have also pledged to achieve “carbon neutrality” or zero carbon emissions by 2050.
- China has announced that it will achieve carbon neutrality by 2060 and this has been welcomed by other major economies.

#### Delinking from China:

- It is anticipated that the Biden administration may engage with China to come up with a template for COP-26.
- That template did not take into account India's interests despite China being part of the BASIC group of Brazil, South Africa, China and India.
- BASIC, as major emerging economies, had been taking coordinated positions at multilateral climate negotiations.
- Going forward, India must delink itself from China, let BASIC become a consultative forum only and reconstruct a larger coalition of developing countries whose climate change goals are more aligned with its own.
- After Paris, BASIC has lost whatever rationale it originally possessed.

### **Course of action for India: Adaptation is the key:**

- There will be some important international conferences before COP-26, where major efforts are expected to set down an agenda for that meeting.
- Biden has called for a summit of major emitting nations on April 22.
- In June there will be a G-7 summit of western countries and Japan to which India has been invited.
- The UK has let it be known that climate change would be at the top of the summit agenda.

### **What should India's stance be at These Meetings?**

- Both for India and other developing countries, it is important that mitigation does not overshadow other key elements of the Paris Climate agreement.
- There has been step-motherly treatment of adaptation, which is a bigger challenge for most developing countries than mitigation is.
- Adaptation should have equal billing with mitigation whenever and wherever climate change action is being deliberated upon.
- India may find itself under pressure to commit to decisions that limit rather than enhance its development prospects.
- One should not yield to pressures to declare a peaking year for India's carbon emissions or to follow China into declaring a target year for carbon neutrality.
- There is a relentless effort by the US and Western European countries to include climate change on the UN Security Council (UNSC) agenda.
- At a recent UNSC meeting, this was strongly opposed by Russia and by India.
- We will need to work out a persuasive case for opposing it since a large number of countries seem to believe that climate change is indeed a security issue and needs to be treated as such.
- The potentially menacing intent behind it should be exposed.

### **Climate Finance Falling Short:**

- The developed countries had committed themselves to providing \$100 billion a year in climate finance to developing countries up to 2020.
- There was a pledge to increase the size of this funding significantly in the period 2021-2025.
- Even by the very accommodative accounting methods used by the OECD, the actual flows have fallen far short, being only \$79 billion in 2018.



- Our own ministry of finance has estimated that there has been only a billion dollars in new and additional finance transferred to developing countries annually against the \$100 billion pledge. It is therefore important for India to highlight the finance component.
- This will also enable the mobilisation of other developing countries, in particular small and medium countries and small island developing states.
- These countries look up to India to provide intellectual leadership in a domain that is often quite technical and complex.

## 2. Vehicles scrappage policy: A step forward but a missed opportunity

### Why in News?

- The much-awaited draft policy on vehicle scrappage is finally out. But the draft policy also misses an opportunity: Of designing the policy as an effective stimulus programme for green recovery in the sector to achieve deeper and quicker air Quality Benefits.

### Background:

- The policy outlines the criteria for defining end-of-life vehicles and scrapping them.
- It also makes provision for scrapping facilities for safe disposal of waste and material recovery.
- This is an important step forward towards building infrastructure for organised and scientific scrapping of old vehicles.

### The Proposal

- This proposed policy seeks to phase out unfit vehicles to reduce vehicular pollution, meet the climate commitments, improve road safety and fuel efficiency, formalize informal vehicle scrapping industry and recover low-cost material for the automotive, steel and electronics industry.
- The policy expects to spin jobs and attract investment as well.
- It is a big positive for supporting a network of well-equipped scrappage facilities with adequate environmental safeguards to stop unsafe dismantling that contaminates the environment.

### Issues with the Policy:

- Advisory Nature
  - ✓ This policy has only 'advised' the state governments and the automobile industry to provide voluntary incentives to the owners of old vehicles.

- ✓ The central government has not committed to make it a fiscal stimulus strategy for quicker renewal of ageing, heavy-duty vehicle fleet with BS-VI vehicles — or to link other segments with targeted electrification.
- Achieving fleet renewal
  - ✓ The focus on targeted fleet renewal for maximum emissions gains is still weak.
  - ✓ The proposed policy puts the entire onus of incentivizing fleet renewal on the state governments.
  - ✓ They have been advised to waive off a big chunk of road tax and registration fees on replacement vehicles.
  - ✓ These are important sources of state revenue, and the reaction of the state governments is still not known.
- No stimulus
  - ✓ The more compelling question is whether the central government would consider a centrally supported stimulus programme for post-pandemic green recovery.
  - ✓ This is the global trend wherein governments have been giving conditional bailouts or tax support linked to emissions targets.
  - ✓ What can be an effective strategy?
- Transportation vehicles
  - ✓ For heavy-duty vehicles, the policy can take a more nuanced approach.
  - ✓ Consider that some truck owners may want to only dispose of the very old trucks without replacing them. But others may want to scrap and replace the older trucks.
  - ✓ In that case, a rebate can be given to the owners of end-of-life vehicles who are interested in ‘only scrapping’ the vehicle without immediately replacing them.
  - ✓ And this rebate can be given based on a scrappage certificate from authorized scrappage centres.
  - ✓ Old trucks with more economic life left can get a comparatively higher incentive as that will give higher emissions benefits.
- Personal vehicles
  - ✓ For these vehicles, the central incentive can be linked with replacement with electric vehicles.
  - ✓ This can be added to the normal scrapping of end-of-life vehicles as already proposed in the draft policy. This can maximise air quality gains.
  - ✓ Personal vehicles are numerous and general public support for their fleet renewal can divert a lion’s share of the allocated budget from the priority heavy-duty segment.

- ✓ Therefore, the public support for the personal vehicle segment can be linked only with voluntary electrification.
- ✓ Build-in manufacturers' responsibility
- ✓ The new policy also needs to align with the mandate for the manufacturers to meet targets for recyclability of material.
- ✓ Make this mandatory as part of the scrappage policy.

### **We have AIS 129:**

- It is encouraging that the Automotive Industrial Standard-129 (AIS 129) on reuse, recycling and material recovery from vehicles were framed in 2015.
- This requires 80-85 per cent of the material used in vehicle manufacturing by mass to be recoverable/recyclable/reusable at the end of life.
- AIS-129 also restricts the use of heavy metals including lead, mercury, cadmium, hexavalent chromium, etc, and asks for the coding of plastics to inform dismantlers.
- The requirement of recyclability should be extended to 85-95 per cent to maximise material recovery as well as energy recovery from residual waste like used oil, non-recyclable rubber etc.

### **Way Forward:**

- This first-ever formal scrappage policy in India is urgently needed to help build infrastructure for safe disposal and material recovery to minimise environmental hazards.
- But India would be adopting scrappage policy during these unprecedented pandemic times, so it is necessary to leverage this targeted fleet renewal with well-designed central support for a post-pandemic green deal.

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## 2. INTERNATIONAL RELATIONS

### 1. Swiss Neutrality in World Affairs

#### Why in News?

- Switzerland's traditional foreign policy of neutrality has become attractive again because of the changing political reality in the world, said its Ambassador recently.

#### Swiss Neutrality:

- Swiss neutrality is one of the main principles of Switzerland's foreign policy which dictates that Switzerland is not to be involved in armed or political conflicts between other states.
- This policy is self-imposed, permanent, and armed, designed to ensure external security and promote peace.
- Under this, Switzerland pursues an active foreign policy and is frequently involved in peace-building processes around the world.

#### Historic Significance:

- Switzerland has the oldest policy of military neutrality in the world; it has not participated in a foreign war since its neutrality was established by the Treaty of Paris in 1815.
- The European powers (Austria, France, the UK, Portugal, Prussia, Russia, Spain and Sweden) agreed at the Congress of Vienna in May 1815 that Switzerland should be neutral.
- But final ratification was delayed until after Napoleon Bonaparte was defeated so that some coalition forces could invade France via Swiss territory.

#### Swiss moves for the status:

- Since World War II, Switzerland has taken a more active role in international affairs by aiding with humanitarian initiatives, but it remains fiercely neutral with regard to military affairs.
- It has never joined the North Atlantic Treaty Organization (NATO) or the European Union, and only joined the United Nations in 2002.

#### Relevance Today:

- Neutrality has become necessary as a foreign policy tool as the phase of power politics has returned in world affairs.
- Now with big power politics, Switzerland's neutrality and Switzerland as a place to meet is much more attractive again.

## 2. Food Waste Index Report 2021

### Why in News?

- The Food Waste Index Report 2021 was recently released by the UNEP.

### Food Waste Index:

- The Food Waste Index is released by the United Nations Environment Programme (UNEP) and partner organisation WRAP.
- It measures tons of wasted food per capita, considering a mixed stream of products from processing through to consumption.
- It was prepared by using data from 54 countries and then extrapolated to the remaining countries.
- Contrary to belief, the study by the UNEP revealed that food waste was a global problem and not that of just the developed world.

### Highlights of the 2021 Report:

- The report has revealed that 17 per cent of all food available at consumer levels was wasted in 2019.
- That year, some 690 million people had to go hungry.
- The food waste amounted to a whopping 931 million tonnes of food sold to households, retailers and restaurants.
- Waste at household, foodservice and retail amounted to 79, 26 and 13 kilogram /capita / year respectively.
- The data, though scarce, revealed that food waste was substantial, regardless of income level.

### Data on India:

- The report notes that food waste at the consumer level happens in almost every country, regardless of income level.
- In South Asia, while 50 kilograms of food is wasted per person each year at the household level in India.
- Others include- 65 kilograms of this happening in Bangladesh, 74 kilograms in Pakistan, 76 kilograms in Sri Lanka, 79 kilograms in Nepal and 82 kilograms in Afghanistan.

### Why it is important to prevent food wastage?

- Food waste also has a substantial Environmental, Social and Economic Impact.

- Food loss and waste cause about \$940 billion per year in economic losses. Reductions can save money for farmers, companies, and households.
- For example, 8-10 per cent of global greenhouse gas emissions are associated with food that is not consumed.
- Reducing food waste would cut greenhouse gas emissions, slow the destruction of nature through land conversion and pollution, enhance the availability of food and thus reduce hunger and save money.

### 3. Deepening Indo-US friendship puzzle

#### Why in News?

- The India-US ties have advanced by leaps and bounds. Yet, there is a persistent underestimation of India's capacity to rework its great power relations.

#### Expanding Partnership:

- India-US relations have been on a steady upward trajectory over the last three decades.
- This partnership withstood significant political transitions in both countries and managed to overcome many difficult barriers.
- The US is now India's most Comprehensive Partner.
- The Russia relationship is long on defence but short on commerce.
- India's commercial ties with China are large, but tilted heavily in Beijing's favour.
- Collective Europe is big on commerce but small on security cooperation.
- The US has a sizeable presence in both economic and security dimensions and the political common ground with India has steadily expanded.

#### So, why persistent doubt in India about the US partnership

- One part of it is the ingrained ideological bias in the dominant foreign policy elite.
- Delhi's stilted debate on the US is, unfortunately, reinforced by the sad absence of investment in institutional capabilities to study American politics, economics and International Relations.

#### Issues with Our Assessment of Relations with India:

- There is an enduring reluctance of India's foreign policy community to either acknowledge or accept the unfolding transformation of India's ties with the US.
- There is also continuing underestimation of India's capacity to rework its great power relations to meet India's changing interests and circumstances.

- It was widely held that the Indo-Pacific and the Quad will become footnotes in Biden's foreign policy.
- This in turn was based on the bet that Biden is likely to embrace China rather than confront it in the manner that Trump did.
- All these assumptions turned out to be inaccurate.
- Concern for democracy and human rights has always been part of US foreign policy ideology.
- But no state, not even a revolutionary one, can run its foreign policy on a single-point agenda.

### **Underestimating India's agency to shape the partnership:**

- Even as it continuously misjudged the US, the Indian foreign policy elite has not appreciated India's agency to shape the relationship with America.
- The conviction that Delhi is perennially under US pressure to accept policies harmful for itself further distorts the discourse in the media and among the chattering classes.
- The evidence from the 1990s — one of India's most vulnerable moments after Independence — should have corrected this misperception.
- The traditional discourse finds it hard to come to terms with the twin factors shaping India's new approach.
- One is the significant increase in India's material capabilities.
- India's aggregate GDP increased ten-fold between 1990 (\$270 billion) and 2020 (about \$2,700 billion).
- Equally important is the new political will in Delhi.

## **4. China, N. Korea threats loom as Blinken, Austin head to Asia**

### **Why in News?**

- Biden administration's first Cabinet-level trip abroad as part of a larger effort to bolster U.S. influence in Asia.

### **Concerns:**

- Threats from China and North Korea have a significant influence on the Biden administration's trip that among other things, aims to calm concerns about America's role in Asia.

- As part of that effort and to reduce the risks of escalation, efforts had been made to connect with the North Koreans since February 2021, including through what is known as the “New York channel.”
- However, there has been no response from North Korea.
- Consultations with North Korea’s neighbours, Japan, South Korea and China are all the more significant for America, as it has not received any response from the reclusive country.

### Highlights:

- Biden has signalled his desire to return the Asia-Pacific to the top of the U.S. foreign policy agenda. This is in line with his broader diplomatic theme “America is back”.
- The new administration is trying to strengthen partnerships with the two key regional allies, Japan and South Korea. Relationships with both countries were transactional and often temperamental under the Trump administration. The U.S. and South Korean negotiators have overcome years of contentious discussions under Mr. Trump to reach a tentative deal on paying for the American troop presence in South Korea. Recently America took part in the Quad virtual leadership summit. It pledged to keep stability in the region at the core of its International Initiatives.

## 5. UK Turns to Indo-Pacific

### Why in News?

- Britain wants to expand its influence among countries in the Indo-Pacific region to try to moderate China’s global dominance.
- A document laying out post-Brexit has highlighted foreign defence policy priorities of the UK.

### Britain’s post BREXIT plan:

- This document is Britain’s biggest foreign and defence policy review since the end of the Cold War.
- It sets out a planned increase to Britain’s nuclear arsenal to weigh against evolving global security threats and underlines the importance of strong ties with the US while naming Russia as the top regional threat.
- It sets out how PM Boris Johnson wants to be at the forefront of a reinvigorated, rules-based international order based on cooperation and free trade.



### Focus on Indo-pacific:

- China and the U.K. both benefit from bilateral trade and investment, but China also presents the biggest state-based threat to the U.K.'s economic security, the report said.
- Calling the Indo-Pacific increasingly the geopolitical centre of the world, the government highlighted a planned British aircraft carrier deployment to the region.
- Britain, the world's sixth-largest economy, is dwarfed economically and militarily by China.
- The UK believes, through soft power and strategic alliances, it can help persuade Beijing to play by the rules of a new, more dynamic international system.

### Content over Hong Kong:

- The Sino-British ties have tensed since over issues including Beijing's security crackdown on former British colony Hong Kong.
- UK needs India for this juncture
- UK PM Boris Johnson has called "India is an increasingly indispensable partner for the United Kingdom."
- India's skilled labour, technological assistance and the vibrant market will open a lot of avenues for Britain which has recently parted ways with the European Union.
- India is not the world's largest telecom market; it is also the fastest-growing.
- According to a study on India's telecom sector, an increase in telecom subscriptions often touches 20 million a month.
- India also offers the cheapest data compared at current market exchange rates. As per cable.co.uk, the price per GB data in India to be \$0.09.
- Along with the world, India is now steering towards 5G. The UK will need India's help to marginalize China in the telecom market.

### What else?

- The report categorised India as "an international actor of growing importance"
- Earlier the British government has approached Washington about a "D10" club of democratic partners, based on G7 plus Australia, South Korea and India.

## 6. Myanmar Refugees Issue

### Why in News?

- India has sealed all entry points along the border with the southeast Asian neighbour and is closely monitoring to prevent any Myanmar nationals from entering the country.

### Issue: Problem with Refugees:

- At least 1,000 people from the adjoining Chin State of Myanmar are said to have crossed over to Mizoram, fearing a military crackdown.
- The Mizoram government favours providing refuge to the Chins that are ethnically related to the majority Mizos in the State.
- However, the Ministry of Home Affairs has made it clear that “India is not a signatory to the 1951 UN Convention relating to the Status of Refugees and the 1967 Protocol thereon”.

### When did the Refugees start Arriving?

- Mizoram began feeling the heat a month after the military coup when three police personnel crossed over to Lungkawlh village in Serchhip district.
- The influx of Myanmar nationals was reported from Hnahthial, Champhai, Saitual and Serchhip districts.
- Most of the refugees waded across the Tiau River that runs along much of Mizoram’s 510-km border with Myanmar.

### Is this the First Time this has Happened?

- Extremism, counter-insurgency and sectarian violence have driven people out of Myanmar into India in the past as well.
- More than 1,200 Buddhists and Christians from Myanmar’s Arakan State had taken refuge in Mizoram’s Lawngtlai district in 2017.
- They fled their homes after the Myanmar Army clashed with the extremist Arakan Army.
- The refugees stayed back for more than a year. Thousands of Chins are said to be living in Mizoram for more than 40 years now.

### How porous is the Border?

- Unlike India’s border with Pakistan and Bangladesh, much of the border with Myanmar is without any fence.
- The Assam Rifles personnel guard the border but a tough terrain comes in the way of maintaining airtight vigil.

- There have been calls to fence the border. Fencing the border would also help in checking the movement of extremist groups to and from Myanmar.
- Some are against the idea, insisting that a fence would make the “free movement” of border residents into each other’s country difficult.
- The two countries had in 2018 agreed to streamline the movement of people within 16 km of the border on either side.

### **Mizoram Welcomes the Refugees:**

- As a Humanitarian Gesture, the Mizoram government has issued a standard operating procedure (SOP) to Deputy Commissioners of border districts to facilitate the entry of refugees and migrants.
- The SOP stated that all Myanmar nationals entering Mizoram in connection with the political developments in the country shall be properly identified.
- The government said those facing a threat to their lives should be treated as refugees, given medical care, relief and rehabilitation and security.

### **Where do the Centre and Mizoram stand now?**

- The SOP was revoked on March 6 after the Centre conveyed its displeasure to the State over the development.
- The State governments have no powers to grant “refugee status to any foreigner”.

## **7. Sanctions on China over Uighurs: Cause & Effect**

### **Why in News?**

- In a coordinated move, many countries-imposed sanctions on Chinese officials for human rights abuses against Uighurs and other minorities in Xinjiang province.

### **The Uighurs:**

- Xinjiang has a large number of Uighurs, Muslims of Turkic descent.
- Over the past few decades, more and more Han Chinese has settled in Xinjiang, which saw violent clashes between them and the Uighurs.

### **Sanctions on China:**

- The European Union, the US, Britain, and Canada imposed sanctions on Chinese Officials.
- Australia and New Zealand issued a joint statement welcoming the Western action, adding they were concerned about reports of abuses from Xinjiang.

- China on the other hand has consistently denied all reports of atrocities against Uighurs, maintaining it is only “deradicalising” elements of its population in the interests of security.

### **Retaliation by China:**

- Those sanctioned by China include five Members of the European Parliament and the Political and Security Committee, the EU’s main foreign policy decision-making body, among others.
- China also summoned the EU ambassador and the UK ambassador to lodge “solemn protests”.

### **Why these Sanctions are Crucial?**

- This is the first time the EU has imposed sanctions on China since an arms embargo after the 1989 Tiananmen Square crackdown. That is still in place.
- Although the EU sanctions are not very damaging, they show a hardening of stance against its largest trading partner.
- Also significant is that the Western powers moved together, in what is being seen as a result of the US push to deal with China along with its allies.
- Nations that claim to be defenders of the faith or self-proclaimed Caliphates are silent on the persecution of Uighurs! They perceived the abrogation of Art. 370 as a doomsday event! This is height of hypocrisy!

### **Reasons behind: Crackdown on Uighurs:**

- China is accused of putting over a million people in internment camps to “de-Muslimise” them and make them integrate better in the Communist country.
- Allegations are that these people have been forced to leave behind their occupations, properties and families, to stay at the camps.
- Survivors, human rights organisations, and governments of other countries have alleged physical, psychological and sexual torture.
- People can be sent to the camps for showing any signs of “extremism” – sporting beards, fasting during Ramzan, dressing differently from the majority, sending Eid greetings, praying “too often” etc.

## 8. The surge of Geopolitics in South Asia's Power Trade

### Why in News?

- India has released new rules governing the trade of electricity across its borders. They define the contours of the South Asian electricity market, placing clear limits on who can buy from and sell into India.

### Highlights:

- This has ramifications for the electricity markets of Bangladesh, Bhutan, and Nepal, which, to varying degrees, have aligned their energy futures with the Indian market.
- The new rules show that India's approach is unmistakably political.
- It attempts to balance China's growing influence in the region with Developmental Aims.

### Rules on Ownership:

- The ownership of power plants wishing to sell to India is of central importance.
- The rules strongly discourage the participation of plants owned by a company situated in a third country with whom India shares a land border and does not have a bilateral agreement on power sector cooperation with India.
- Chinese companies hoping to establish plants in Nepal, Bhutan, or Bangladesh will have a hard time making good on their investments with the Indian market cut off.
- The rules place the same security restrictions on tripartite trade. Eg.: from Bhutan to Bangladesh through Indian territory.
- Also, the rules establish elaborate surveillance procedures to detect changes in the ownership patterns of entities trading with India.
- With this, South Asia's electricity politics has hit a holding pattern after several years of Unpredictability.

### Guidelines on electricity trade:

- India used the framework of the South Asian Association for Regional Cooperation (SAARC) to make historical moves towards liberalising electricity trade.
- But, China soon began to make its presence felt in the region, and India responded by imposing stringent restrictions that dissuaded everyone other than Indian and government entities from participating.
- This move threatened to weaken the private sector participation and promising joint ventures across the region.

- Nepal and Bhutan protested for years, leading to new guidelines in 2018 that tried to find a middle ground.
- These rules formalise that balancing act.
- They allow private sector participation but exclude Chinese investments.

### India-centricity No Advantage:

- The institutional structure that has emerged over the last decade is India-centric.
- The Government of India, through ministries, regulators, planning bodies and utilities, determines the rules of the road.
- India's geographic centrality combines with its economic heft to give it a natural advantage in determining the shape of the market.
- All electrons must pass through it and most electrons will be bought by it.
- Therefore, India will enjoy pre-eminent rule-setting powers, but continually attract the wrath of its smaller neighbours who feel their Economic Growth is being stunted.

### Countering China:

- The likely first battle will be in Southeast Asia, where China presently has great influence.
- A considered, stable institutional model will likely surpass anything China has to offer.
- It is worth considering releasing the vice-like grip on South Asia, aimed at countering China, by creating a rule-based regional institution that can counter Chinese offerings.

### Way Forward:

- These rules provoke some larger questions that must be tackled soon.
- An ad hoc design also makes the Indian project less attractive to countries looking to sign up to a power trading project.
- India's ambition of anchoring a global super-grid called One Sun One World One Grid, or OSOWOG needs an institutional vision.
- It aims to begin with connections to West Asia and Southeast Asia and then spread to Africa and beyond.
- The logic underpinning OSOWOG is sound. Renewable energy transitions benefit from grids that cover vast areas and diverse geographic conditions.
- Multi-country grids allow for the unpredictable outputs from renewable energy plants to be balanced across countries, thus avoiding expensive country-specific balancing technologies such as hydropower and gas plants.

- Political realities will constantly collide with, and damage, expansive visions of borderless trade. Impartial institutions for planning, investments and conflict resolution are crucial to multi-country Power Pools.

## 9. India Abstains in UNHRC vote on Sri Lanka

### Why in News?

- India abstained from a crucial vote on Sri Lanka's rights record at the United Nations Human Rights Council in Geneva.

### Highlights:

- The resolution on 'Promoting reconciliation, accountability and human rights in Sri Lanka' was adopted after 22 states of the 47-member Council voted in its favour.
- While 14 countries, including India, Japan and Nepal, abstained from voting, 11 countries, including China, Pakistan, Russia and Bangladesh voted against the resolution, and in support of the Sri Lankan government.
- Sri Lanka is resisting the process envisaged in the resolution to prosecute war criminals through an international evidence gathering and investigation mechanism.
- The Sri Lankan administration was counting on India's support and had even expressed its confidence in obtaining India's support at the Human Rights Council voting.
- On the other hand, the Tamil National Alliance (TNA) sought the exact opposite outcomes on the resolution.

## 10. Remove the wedges in India-Bangladesh ties

### Why in News?

- 2021 marks 50 years since the independence of Bangladesh. India has played a key role in Bangladesh's Liberation War and the friendship continues to grow. India lent its support on the political, diplomatic, military and humanitarian front, and India's soldiers gave up their lives and an estimated 10 million Bangladeshi refugees took shelter in India.

### Tracing the Journey of the Relationship:

- The relationship between India and Bangladesh has vacillated through highs and lows depending on the regimes in power.

- It had remained cordial until the assassination of Bangladesh's founding President Sheikh Mujibur Rahman in 1975, followed by a period of military rule and the rise of General Ziaur Rahman who became President and also assassinated in 1981.
- It thawed during the period of 1982-1991 when a military-led government by General H.M. Ershad ruled the country.
- Since Bangladesh's return to parliamentary democracy in 1991, we have seen drastic developments. In the last decade, India-Bangladesh relations have warmed up, entering a new era of cooperation, and moving beyond historical and cultural ties to become more assimilated in the areas of trade, connectivity, energy, and defence.

### **Achievements and Progress:**

- Both the countries have solved the border issues amicably by ratifying the historic Land Boundary Agreement in 2015, where enclaves were exchanged allowing inhabitants to choose their country of residence and become citizens of either India or Bangladesh.
- The Bangladesh government led by Prime Minister Sheikh Hasina has uprooted anti-India insurgency elements from its borders, making the India-Bangladesh border one of the region's most peaceful.
- This has allowed India to make a massive redeployment of resources to its more contentious borders elsewhere along India's borders and tension prone areas.

### **Bilateral trade between India and Bangladesh:**

- Bangladesh today is India's biggest trading partner in South Asia with exports to Bangladesh in FY 2018-19 at \$9.21 billion and imports at \$1.04 billion.
- India has offered duty-free access to multiple Bangladeshi products.
- India has extended three lines of credit to Bangladesh in recent years amounting to \$8 billion for the construction of roads, railways, bridges, and ports.
- Issues:
- In the last eight years until 2019, only 51% of the first \$800 million line of credit has been utilised whilst barely any amount from the next two lines of credit worth \$6.5 billion has been mobilised.
- This delay and progress is due to red-tapism from India's end and from Bangladesh's side, it may be due to the slow implementation of the project.

### **The Connectivity Boost:**

- Connectivity between the two countries has greatly improved.



- A direct bus service between Kolkata and Agartala runs a route distance of 500 km, as compared to the 1,650 km it would have run through the Chicken's Neck, to remain within India.
- There are three passenger and freight railway services running between the two countries, with two more routes on their way to be restored.
- Recently, a 1.9-kilometre long bridge, the Maitri Setu, was inaugurated by Prime Minister Narendra Modi, connecting Sabroom in India with Ramgarh in Bangladesh.

### **Enhanced cooperation in shipping and inland water trade:**

- Bangladesh allows the shipment of goods from its Mongla and Chattogram (Chittagong) seaports carried by road, rail, and waterways to Agartala (Tripura) via Akhura; Dawki (Meghalaya) via Tamabil; Sutarkandi (Assam) via Sheola, and Srimantpur (Tripura) via Bibirbazar.
- This allows landlocked Assam, Meghalaya and Tripura to access open water routes through the Chattogram and Mongla ports.

### **Bones of contention:**

- Despite the remarkable progress, the unresolved Teesta water sharing issue looms large.
- Border killings are yet to stop. The year 2020 saw the highest number of border shootings by the Border Security Force. The shots are fired at civilians, usually cattle traders, who are usually unarmed, trying to illegally cross the border.
- The government's proposal to implement the National Register of Citizens across the whole of India may result in a bleak atmosphere between the countries.
- It remains to be seen how India addresses the deportation of illegal Muslim immigrants, some of whom claim to have come from Bangladesh.

### **China's influence in the region:**

- In spite of its 'Neighborhood First Policy', India has been losing its influence in the region to China.
- Sri Lanka, Nepal and the Maldives, once considered traditional Indian allies, are increasingly tilting towards China due to the Asian giant's massive trade, infrastructural and defence investments in these countries.
- Bhutan also does not abide by Indian influence as evinced by its withdrawal from the BBIN (Bhutan-Bangladesh-India-Nepal) motor vehicles agreement.
- China, in lieu of its cheque-book diplomacy, is well-entrenched in South Asia, including Bangladesh, with which it enjoys significant economic and defence relations.

## Way forward:

- India-Bangladesh relations have been gaining positive momentum over the last decade.
- Going forward India has to be generous enough to let the water flow (the Teesta issue has to be settled) and the issues concerning illegal migration has to be addressed by well-established protocols of both countries.
- Trade could be more balanced if non-tariff barriers from the Indian side could be removed.
- These small but important steps can remove long-standing snags in a relationship that otherwise is gradually coming of age in 50 years.

## 11. Japan to fund A&N, metro expansion

### Why in News?

- In the first-ever official development assistance (ODA) project in Andaman & Nicobar (A&N), Japan has approved grant aid worth ₹265 crore, to improve the power supply in the islands.

### Highlights:

- This is the first-ever ODA project in the strategic islands of Andaman & Nicobar (apart from humanitarian emergency assistance).
- While approving the grant, Japan stressed the strategic geopolitical location of the islands for a free, open and inclusive Indo-Pacific.
- India is key to the Quad and the Indo-Pacific region.
- Cooperation between Japan and India on these crucial islands demonstrate the commitment of both countries to realising a stable, peaceful and prosperous Indo-Pacific.
- The grant would be used to procure 15MWh batteries as well as power system stabilisers to allow better utilisation of solar power generated in South Andaman.
- Japan has also extended yen loans worth ₹16,186 crore, for executing four projects, including Delhi Metro's Phase 4 and Bengaluru Metro's Phase 2 expansion plans.
- Loan agreements have been signed between the Japan International Cooperation Agency (JICA) and the government.
- A loan of ₹807 crore was extended for crop diversification in Himachal Pradesh and ₹3,272 crore in loans to rural water supply with a focus on mitigating fluorosis in Rajasthan's Jhunjhunu and Barmer districts.

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## 12. Heart of Asia – Istanbul Process (HoA-IP)

### Why in News?

- External Affairs Minister S Jaishankar has attended the Heart of Asia Conference in Dushanbe, Tajikistan.

### Heart of Asia – Istanbul Process:

- The Heart of Asia – Istanbul Process (HoA-IP) is an initiative of Afghanistan and Turkey, which was officially launched at a conference hosted by Turkey in Istanbul on 2 November 2011.
- Since then, Afghanistan supported by fourteen participating countries and supporting countries beyond the region as well as 12 Regional and International Organizations is leading and coordinating this Process.

### Goals of the Process:

- The HoA-IP aims at promoting and strengthening peace, security, stability and prosperity in Afghanistan and in the region.
- The HoA-IP has become one of the most interactive voluntary state-groupings in the HoA Region.
- It brings Afghanistan's immediate and extended neighbours as well as international supporters together through the following focus areas:
  - ✓ Political Consultations
  - ✓ Implementation of the Confidence Building Measures (CBMs)
  - ✓ Cooperation with Regional Organizations.

## 3. INTERNAL SECURITY & DISASTER MANAGEMENT

### 1. EX Desert FLAG VI

#### Why in News?

- EX Desert FLAG VI is scheduled to be held from March 3 to March 27 at Al-Dhafra airbase, UAE.

#### Exercise Desert Flag:

- Ex Desert Flag is an annual multi-national large force employment warfare exercise hosted by the United Arab Emirates Air Force.
- The Indian Air Force is participating for the first time in Exercise Desert Flag-VI along with the air forces of the United Arab Emirates, the United States of America, France, Saudi Arabia, South Korea and Bahrain.
- The IAF is participating with six Su-30 MKI, two C-17 and one IL-78 tanker aircraft.
- C-17 Globemaster will provide support for induction/de-induction of the IAF contingent.
- Su-30 MKI aircraft will undertake long range ferry, routing direct from India to the exercise area with aerial refueling support from IL-78 tanker aircraft.
- The aim of the exercise is to provide operational exposure to the participating forces while training them to undertake simulated air combat operations in a controlled environment.
- The participating forces will get an opportunity to enhance their operational capabilities along with mutual exchange of best practices.

### 2. 'India's Arms Imports Down by 33%'

#### Why in News?

- According to a report from a Swedish think tank, Stockholm International Peace Research Institute (SIPRI), India's arms imports decreased by 33% between 2011–15 and 2016–20.

#### Highlights:

- Despite a fall in imports, India continues to remain the second-largest arms importer after Saudi Arabia.
- A drop in arms imports between 2011–15 and 2016–20 seems to be mainly due to its complex and lengthy procurement processes, combined with its attempts to reduce its dependence on Russian arms by diversifying its network of arms suppliers.
- Russia was the largest arms supplier in both periods.

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- Russia's deliveries dropped by 53% between the two periods and its share of Indian arms imports fell from 70 to 49%.
  - The U.S. was the second-largest arms supplier to India in 2011–15 but in 2016–20, India's arms imports from the U.S. were 46% lower than in the previous five-year period, making the U.S. the fourth-largest supplier in 2016–20.
  - France and Israel were the second and third largest arms suppliers in 2016–20.

#### **India's plans over the next 5 years:**

- As India perceives increasing threats from Pakistan and China and as its ambitious plans to produce its own major arms have been significantly delayed, it is planning large-scale programmes for arms imports.
- Based on its outstanding deliveries of combat aircraft, air defence systems, ships and submarines, India's arms imports are expected to increase over the coming 5 years.

