

OFFICERS' Pulse

AUGUST, 2021

***updated**

- The Hindu
- Indian Express
- PIB
- Yojana
- Kurukshetra
- Rajya Sabha TV
- Down to Earth



CURRENT AFFAIRS Monthly

THE **PULSE** OF UPSC AT YOUR FINGER TIPS.

Contents

Schemes.....	3	Science and Technology.....	27
1) Pradhan Mantri Ujjwala Yojana (PMUY) 2.0.....	3	1) Smog tower.....	27
2) PM-DAKSH Yojana.....	3	2) Food Fortification.....	28
3) Seekho aur Kamao.....	4	3) IMF warns against adoption of Cryptocurrencies.....	30
4) Saansad Adarsh Gram Yojana.....	4	4) Deep Ocean Mission.....	31
5) Samagra Shiksha.....	5	Reports and Indices.....	33
6) SANKALP Scheme.....	7	1) Periodic Labour Force Survey.....	33
Initiatives.....	9	2) Financial Inclusion Index.....	34
1) E-Shram Portal.....	9	3) North-Eastern Region District SDG Index.....	34
2) Ubharte Sitaare Fund.....	9	4) IPCC's Sixth Assessment Report.....	35
3) SAMVAD.....	9	Organisations.....	39
4) EASE 4.0.....	10	1) United Nations Security Council.....	39
5) SAMRIDH Programme.....	10	2) New Development Bank.....	41
6) SVEEP Program.....	11	3) UNITE Aware.....	41
7) e-RUPI.....	11	4) BRICS Agriculture Research Platform.....	42
8) National Edible Oil Mission-Oil Palm.....	12	Polity.....	44
9) Strategic Crude Oil Reserves.....	13	1) Insolvency and Bankruptcy Code (Amendment) Bill, 2021.....	44
Environment.....	15	2) Taxation Laws (Amendment) Bill.....	45
1) Ban on Single-use Plastic.....	15	3) Essential Defence Services Bill, 2021.....	47
2) Eco-Sensitive Zone.....	16	4) AERA Bill, 2021.....	48
3) Sambhar Lake needs faster restoration.....	17	5) Constitution (One Hundred and Twenty-Seventh Amendment) Act, 2021.....	49
4) Kigali Amendment on phasing down HFCs.....	17	6) Controller General of Accounts.....	50
5) SUJALAM Campaign.....	19	7) NALSA.....	51
6) Ramsar Convention.....	21	8) Pardoning powers.....	52
7) Renewable energy capacity crosses mile-stone of 100 GigaWatts.....	22	9) Juvenile Justice Amendment Bill 2021.....	53
8) World Elephant Day.....	23	10) Parties get 48 hours to publish candidates' criminal records.....	55
Agriculture.....	25	Economy.....	57
1) Fair and Remunerative Price.....	25	1) G-SAP 2.0.....	57
Flora & Fauna.....	26		
1) White Bellied Heron.....	26		

2) Govt. cautions savers against Nidhi firms	57
3) National Monetisation pipeline.....	58
4) Government e-Marketplace	59
5) Centre to free up untapped space in SEZs	59
6) Commercial coal mining	60
International Relations	62
1) Chagos Archipelago Dispute.....	62

2) Greater Malé Connectivity Project.....	63
3) Indus Water Treaty	63
Art and Culture.....	65
1) Abanindranath Tagore.....	65
Defence.....	66
1) Al-Mohed Al - Hindi Exercise	66
2) Exercise INDRA	66
3) Defence India Startup Challenge	66

Schemes

1) Pradhan Mantri Ujjwala Yojana (PMUY) 2.0

About PMUY

- The **Ministry of Petroleum & Natural Gas** launched PMUY in 2016 to **provide clean cooking fuel to poor households.**
- It aimed at providing **8 crore deposit free LPG connections to poor households.** The connections are issued in the **name of women** of the households.
- The scheme increases the usage of LPG and **helps in reducing health disorders, air pollution and deforestation.** Use of fossil fuels and conventional fuel like cow-dung, firewood etc. has serious implications on the health of rural women and children.
- Initially, the beneficiaries were identified through Socio Economic Caste Census (SECC), 2011 data. The **scope of PMUY has now been expanded to cover all the poor families in the country** subject to fulfilling the terms and conditions.
- Under the scheme, **cash assistance of Rs. 1600** is given to the beneficiaries to get a deposit-free new connection. Further, interest free loans are provided to purchase a stove and refill by Oil Marketing Companies.

Why in News?

- Prime Minister Narendra Modi has launched the second phase of Pradhan Mantri Ujjwala Yojana - Ujjwala 2.0.
- During Ujjwala 1.0, launched in 2016, a target was set to provide LPG connections to 5 crore women members of BPL households. Later, the target was revised to **8 Crore LPG connections which was achieved in August 2019.**
- In the **Union budget for Financial Year 2021-22, a provision for an additional one crore LPG connection**

under the Pradhan Mantri Ujjwala Yojana was announced. These one crore additional connections under Ujjwala 2.0 aim to provide **deposit-free LPG connections to those low-income families who could not be covered under the earlier phase of this scheme.**

- Along with a deposit free LPG connection, Ujjwala 2.0 will **provide first refill and hotplate free of cost to the beneficiaries.**
- Also, the enrollment procedure will require **minimum paperwork.** In Ujjwala 2.0, **migrants will not be required to submit ration cards or address proof.**

2) PM-DAKSH Yojana

About the Yojana

- The **Pradhan Mantri Dakshta Aur Kushalta Sampann Hitgrahi, PM-DAKSH Yojana** is being implemented by the Ministry of Social Justice and Empowerment from 2020-21.
- The scheme aims to cover **marginalized persons of Scheduled Castes, Other Backward Classes, Economically Backward Classes, Denotified Tribes and Safai karamcharis including waste pickers.**
- Under this Yojana, eligible target groups are being provided **skill development training programmes** on (i) Up-skilling/Re-skilling (ii) Short Term Training Programme (iii) Long Term Training Programme and (iv) Entrepreneurship Development Program (EDP).
- The scheme is implemented by the **three Corporations**
 1. National Scheduled Castes Finance and Development Corporation (NSFDC),

2. National Backward Classes Finance & Development Corporation (NBCFDC) &
3. National Safai Karamcharis Finance and Development Corporation (NSKFDC).

Why in News?

- The Ministry of Social Justice and Empowerment has launched **PM-DAKSH Portal and PM-DAKSH Mobile App developed by the Ministry in collaboration with National e-Governance Division (NeGD)** of the Ministry of Electronics and Information Technology.
- The portal and app aims to **make the skill development schemes accessible to the target groups.**
- Through the portal and app the youth of the target groups will now be able to avail the benefits of skill development training programmes more easily.
- PM- DAKSH Portal is available at **pmdaksh.dosje.gov.in** while 'PM-DAKSH' Mobile App is available in **Google play store.**

3) Seekho aur Kamao

About the Scheme

- Seekho aur Kamao (Learn & Earn) is a scheme implemented by the **Ministry of Minority Affairs** since 2013-14 and is **aimed at skill development of minorities.**
- The scheme entails upgrading the skills of minority youth in various modern/traditional skills depending upon their qualification, present economic trends and market potential, which can earn them suitable employment or equip them with skills to opt for self-employment.

Objectives

- The scheme aims to:
 - To bring down the unemployment rate of minorities;
 - To conserve and update traditional skills of minorities and

establish their linkages with the market;

- To improve employability of existing workers, school dropouts etc. and ensure their placement;
- To generate means of better livelihood for marginalized minorities and bring them into the mainstream;
- To enable minorities to avail opportunities in the growing market;
- To develop potential human resources for the country.

Why in News?

- The Ministry of Minority Affairs has informed Parliament that in the last 7 years around 4 lakh persons have been benefited under the 'Seekho aur Kamao' scheme.

4) Saansad Adarsh Gram Yojana

About the Scheme

- Saansad Adarsh Gram Yojana (SAGY) was launched in **2014** with the aim to **translate the comprehensive vision of Mahatma Gandhi about an ideal Indian village into reality**, keeping in view the present context.
- Under SAGY, **each Member of Parliament adopts a Gram Panchayat and guides its holistic progress giving importance for social development at par with infrastructure.**
- By involving villagers and leveraging scientific tools, a **village development plan** is prepared under the leadership of a Member of Parliament. The distinct feature of this Yojana is that it is:
 - ✓ Demand Driven
 - ✓ Inspired by Society
 - ✓ Based on People's Participation.

Objective of SAGY

- To trigger processes which lead to a **holistic development of the identified Gram Panchayats.**

- To **substantially improve the standard of living and quality of life of all section of the population** through -
 1. Improved basic amenities
 2. Higher productivity
 3. Enhanced human development
 4. Better livelihood opportunity
 5. Reduced disparities
 6. Access to right and entitlements
 7. Wider social mobilization
 8. Enriched social capital
- To generate **models of local level development and effective local government** which can motivate and inspire neighboring Gram Panchayats to learn and adapt.
- To nurture the identified Adarsh Grams as **schools of local development** to train other gram panchayats.

Different approach to achieve the objectives of SAGY

- Leveraging the leadership, capacity, commitment and the energy of the Member of Parliament to develop model Gram Panchayat.
- Engaging with and mobilizing the community for participatory local level development.
- Converging different government programs and private and voluntary initiatives to achieve comprehensive development in tune with people's aspiration and local potential.
- Building partner with a voluntary organization, co-operative and academic and research institutions.
- Focusing on outcomes and sustainability.

How to select a village for Saansad Adarsh Gram Yojana?

- A **Gram panchayat** would be the basic unit. It will have a population of **3000-5000 in plain areas** and **1000-3000 in the hilly, tribal and difficult area**.
- The MP would be free to identify a suitable Gram Panchayat to be developed as Adarsh Gram, **other than**

his/her own village or that of his/her spouse.

- The MP will identify one Gram Panchayat to be taken up immediately, and two other to be taken up little later.
- **Lok Sabha MP** has to choose a Gram Panchayat from **within his/her constituency** and for **Rajya Sabha MP** a Gram Panchayat from the rural area of a district of his/her choice in the **State from which he/she is elected.**

Activities in an Adarsh Gram

- An Adarsh Gram should evolve out of people's shared vision, using their capacities and available resources to the best extent possible, duly facilitated by the MP, the Gram Panchayat, civil society and the government machinery.
- Naturally, the elements of an Adarsh Gram would be context specific. However, it is still possible to broadly identify the important activities. They would include:
 1. Personal Development
 2. Social Development
 3. Human Development
 4. Economic Development
 5. Environmental Development
 6. Social Security
 7. Basic amenities & services
 8. Good Governance.

Why in News?

- The Union Government has announced that 976 Gram Panchayats have been adopted by Members of Parliament for the development under Sansad Adarsh Gram Yojana since 2018.

5) Samagra Shiksha

About the scheme

- Samagra Shiksha is an overarching programme for the school education sector extending from **pre-school to class 12**. The **centrally sponsored scheme** has been prepared with the broader goal of improving school effectiveness measured in terms of

equal opportunities for schooling and equitable learning outcomes.

- It subsumes the three Schemes of **Sarva Shiksha Abhiyan (SSA)**, **Rashtriya Madhyamik Shiksha Abhiyan (RMSA)** and **Teacher Education (TE)**.
- The Integrated Scheme envisages the 'school' as a **continuum** from pre-school, primary, upper primary, secondary to senior secondary levels.
- It was introduced in the **Union Budget, 2018-19**. The programme is implemented as a **Centrally Sponsored Scheme** by the **Department of School Education and Literacy**.

Objectives

- The major objectives of the Scheme are
 1. Provision of quality education and enhancing learning outcomes of students;
 2. **Bridging Social and Gender Gaps** in School Education;
 3. **Ensuring equity and inclusion** at all levels of school education;
 4. Ensuring minimum standards in schooling provisions;
 5. Promoting **Vocationalisation of education** and
 6. Support States in implementation of Right of Children to Free and Compulsory Education (RTE) Act, 2009;

Fund Sharing Pattern

- The **fund-sharing pattern** for the scheme between Centre and States is at present in the ratio of **90:10 for the North-Eastern and Himalayan States** and **60:40 for all other States and Union Territories with Legislature**.
- It is **100% centrally sponsored for Union Territories without Legislature**.

Measures taken

- **Bridging gender and social category gaps at all levels of school education** is one of the major objectives of the scheme. The scheme reaches out to

girls and children belonging to SCs, STs, minority communities and transgender. The scheme also gives **attention to urban deprived children, children affected by periodic migration and children living in remote and scattered habitations**.

- Acknowledging that issues such as lack of toilets in schools and unavailability of schools within a short distance play a big role in school dropouts, especially among girls, the scheme supports states for **strengthening of school infrastructure including in rural areas**.
- Under Samagra Shiksha, various interventions have been targeted to promote education, which include opening of schools in the neighbourhood, provision of free textbooks up to Class VIII, uniforms to all girls and SC, ST, BPL boys up to class VIII, provision of gender segregated toilets in all schools, teachers' sensitisation programmes to promote girls' participation, construction of residential quarters for teachers in remote/hilly areas/in areas with difficult terrain.
- In addition, there is a provision for **twinning of schools** under which well-functioning private or government schools in urban or semi-urban areas are linked with schools located in rural areas for interaction and exchange of experience.
- The Department of School Education and Literacy is also implementing the **component of vocational skills training** under the umbrella of Samagra Shiksha.

Why in News?

- The Union Cabinet has approved the **extension of the centrally sponsored Samagra Shiksha scheme from April 1, 2021 to March 31, 2026** with an estimated outlay of around ₹3 lakh crore.

- The scheme is in accordance with **Sustainable Development Goal for Education (SDG-4)** and has now been **aligned with the National Education Policy (NEP) 2020** to ensure inclusive and equitable, quality and holistic school education.
- The scheme covers 11.6 lakh schools, over 15.6 crore students and 57 lakh teachers of government and aided schools (from pre-primary to senior secondary level).

New Interventions

- Keeping with the NEP's recommendations on encouraging Indian languages, the revamped scheme has a **new component for appointment of language teachers**, which includes salaries, and training costs as well as bilingual books and teaching learning material.
- In accordance with NEP's recommendation on pre-primary education, Samagra Shiksha will now include **funding to support pre-primary sections at government schools**, both in terms of teacher training as well as ₹500 per child per year for teaching and learning materials, indigenous toys and games and play-based activities. **Master trainers** for pre-primary teachers and anganwadi workers will be supported under the scheme and in-service teacher **training for Early Childhood Care and Education (ECCE)**.
- Another new component is the **NIPUN Bharat initiative for foundational literacy and numeracy**, which will get an annual provision of ₹500 per child for learning materials, ₹150 per teacher for manuals and resources and ₹10-20 lakh per district for assessment.
- As part of digital initiatives, there is a provision for **Information and Communication Technology (ICT) labs and smart classrooms**, including support for digital boards, virtual

classrooms and DTH channels which have become more important in the wake of the COVID-19 pandemic.

- The pandemic is likely to cause more school dropouts as well, so it is important that Samagra Shiksha now includes a provision to **support out of school children from age 16 to 19 with funding of ₹2000 per grade to complete their education via open schooling**.
- The Centre also plans to pay students their **Right to Education entitlements such as textbooks, uniforms and transport allowance in the form of direct benefit transfer (DBT)**.
- There will also be a **greater focus on skills and vocational education**, both for students in school and dropouts.
- Other features of the revamped scheme includes:
 - ✓ **Incinerator and sanitary pad vending machines** in all girls' hostels;
 - ✓ Training for 3 months for inculcating self-defence skills under '**Rani Laxmibai Atma Raksha Prashikshan**';
 - ✓ **Additional Sports grant of up to Rs. 25,000 to schools** in case at least 2 students of that school win a medal in Khelo India school games at the National level.

6) SANKALP Scheme

About the Scheme

- Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP) is a **supporting programme to skill training schemes** which focuses on improvement of quality, strengthening of institutions and inclusion of weaker sections in skill training.
- It is a **World Bank loan assisted centrally sponsored programme of the Ministry of Skill Development**

and Entrepreneurship (MSDE) with three key Result Areas (RA), namely

1. Institutional Strengthening at Central, State, and District level;
 2. Quality Assurance of skill development programmes; and
 3. Inclusion of marginalized populations in skill development programmes.
- SANKALP was launched in **2018** and has a tenure till **March 2023**.

Outcomes

- SANKALP has undertaken several initiatives to contribute to improvement in employability, some of which are as under:
 1. **Strengthening of District Skill Committees** for improved access to and demand driven skill trainings for employment.
 2. **Emphasis on skill certification in Recognition of Prior Learning (RPL)** at Gram Panchayat level for improving employment qualitatively.

3. Funded development of an IT system namely "**Skill India Portal**" to capture the data for skilling related activities across the country.
4. **Global Skill Gap study** was conducted to identify the global gaps in demand and supply of skilled manpower as well as overseas employment opportunities for skilled workers from India. The Report helped in identifying important countries of interest as destination and job roles of interest.
5. A **Gender Action Plan (GAP)** has been prepared for promoting inclusion of women in Short term skilling and livelihood opportunities.

Why in News?

- This information was given by the Union Minister of Skill Development and Entrepreneurship, Dharmendra Pradhan in a written reply in the Rajya Sabha recently.

Initiatives

1) E-Shram Portal

What's in the news?

- The Ministry of Labour and Employment has unveiled the e-shram portal which aims to **register 38 crore unorganised workers**, such as construction labourers, migrant workforce, street vendors and domestic workers, among others.
- The workers will be issued an **e-Shram card containing a 12 digit unique number**, which will help in including them in social security schemes.
- The portal would lead to the creation of a **national database of unorganised workers**.
- Apart from being **Aadhaar-linked**, it will **collect details of the name, occupation, address, educational qualification, skill types and family of the registered workers**.
- The portal was developed by the Ministry of Labour & Employment in technical collaboration with the **National Informatics Centre** (an attached office under the Ministry of Electronics and Information Technology).
- The portal is open to workers engaged in the **unorganised sector and aged between 16 and 59**.

2) Ubharte Sitaare Fund

What's in the news?

- Union Finance Minister Nirmala Sitharaman has launched an ambitious 'Ubharte Sitaare Fund' (USF) for **export-oriented firms and startups**.
- The Fund aims at **arranging funds for promotion of micro, small and medium companies**. The fund has been set up by **Exim Bank and SIDBI**.

About the Fund

- The fund will invest by way of equity, and equity-like products, in export-

oriented units, **both in the manufacturing and services sectors**.

- The fund is expected to identify Indian enterprises with potential advantages by way of technology, products or processes along with export potential, but which are currently underperforming or unable to tap their latent potential to grow.
- Some of the objectives of the fund include enhancing India's competitiveness in select sectors through finance and extensive handholding support, identifying and nurturing companies having differentiated technology, products or processes, and enhancing their export business.
- In her Budget speech last year, Sitharaman had mentioned that MSMEs are vital to keep the wheels of economy moving. They also create jobs, innovate and are risk takers.

3) SAMVAD

About the Program

- The **Ministry of Women and Child Development** launched the project called SAMVAD (Support, Advocacy and Mental Health Interventions for Children in Vulnerable Circumstances and Diseases) which is aimed at **mental health outreach for children who are abandoned and orphaned, child survivors of trafficking, or in conflict with law**.
- Launched in 2020, the project is led by the **National Institute of Mental Health and Neurosciences (NIMHANS)** and is being run in **collaboration with Panchayati Raj Ministry**.
- It aims at enhancing child and adolescent psychosocial well-being, particularly of children in difficult circumstances, through promotion of

integrated approaches to mental health and protection.

Why in News?

- The Ministry of Women and Child Development has launched the 2nd phase of the SAMVAD program recently.
- The project is providing a coping mechanism for children in distress by **training close to 1 lakh stakeholders** comprising Child Protection Functionaries, tele-counsellors, educators, law professionals among others.

4) EASE 4.0

What is in the news?

- Finance Minister Nirmala Sitharaman has unveiled the fourth edition of the **EASE (Enhanced Access and Service Excellence) reforms agenda for public sector banks (PSBs)** with a focus on **deepening the customer-centric digital transformation of the lenders.**
- The reforms agenda is aimed at **institutionalising clean and smart banking.** The first edition of EASE 1.0 was launched in **2018**, while EASE 3.0 was unveiled in **2020**, aimed at enhancing the ease of banking across all customer experiences, employing analytics, technology, and alternate data.

About EASE 4.0

- With mobile and internet banking gaining currency amidst the pandemic, EASE 4.0 commits PSBs to **tech-enabled, simplified and collaborative 24x7 banking.**
- Under EASE 4.0, the **theme of new-age 24x7 banking with resilient technology** has been introduced to ensure **uninterrupted availability of banking services** by ensuring 24x7 availability of select banking channels, improving the reliability of technology platforms, and aligning internal

processes in the PSBs to deliver such services.

- In addition to the aforementioned new themes, several other new reforms will be added to existing themes, such as increased use of digital and data for agriculture financing through partnerships with third parties for alternative data exchange, driving impetus on digital payments in semi-urban and rural areas, at-scale adoption of doorstep banking services for PSB customers, etc.

5) SAMRIDH Programme

What is in the news?

- The **Ministry of Electronics and Information Technology (MeitY)** has announced the **Startup Accelerator for Product Innovation, Development & Growth (SAMRIDH) programme**, which aims to **help growing startups in India.**

About SAMRIDH

- SAMRIDH will create a conducive platform for Indian software product startups to enhance their products and secure investments for scaling their business.
- The SAMRIDH initiative will not only provide **funding support to startups**, but will also help in **bringing skill sets** together which will help them become successful.
- The SAMRIDH programme will **focus on accelerating 300 start-ups** by providing customer connect, investor connect, and international expansion opportunities in the next three years.
- Also, an **investment of up to Rs 40 lakh to startups**, based on their current valuation and growth stage will be provided through selected **startup accelerators.**
 - *Startup accelerators provide early-stage companies that already have a minimum viable product with the education, resources and mentorship needed*

to promote what might otherwise be several slow years of growth into a few short months.

- The programme aims to further the Indian startup growth which has seen the emergence of **63 unicorns** (Startups with over \$1 billion valuation), making **India the third largest unicorn hub globally** with a total valuation of \$168 billion.

6) SVEEP Program

What is it?

- **Systematic Voters' Education and Electoral Participation program**, better known as **SVEEP**, is the flagship program of the **Election Commission of India** for **voter education, spreading voter awareness and promoting voter literacy in India**.
- Since **2009**, the Election Commission through its SVEEP program has been working towards preparing India's electors and equipping them with basic knowledge related to the electoral process.
- SVEEP's primary goal is to **build a truly participative democracy in India** by encouraging all eligible citizens to vote and make an informed decision during the elections.
- The programme is based on multiple general as well as targeted interventions which are designed according to the socio-economic, cultural and demographic profile of the state as well as the history of electoral participation in previous rounds of elections and learning thereof.

Why in News?

- The Election Commission recently conducted a two-day SVEEP Consultation Workshop to review State SVEEP Plans for the forthcoming elections.

7) e-RUPI

What is in the news?

- Prime Minister Narendra Modi recently launched a new digital payment system - e-RUPI - which will enable the government to send monetary benefits directly to beneficiaries' mobile phones.
- The e-RUPI system is developed by **National Payments Corporation of India (NPCI), Department of Financial Services, National Health Authority and Ministry of Health and Family Welfare**.

What is the e-RUPI system?

- e-RUPI is a **digital voucher that can be redeemed by beneficiaries** when they make use of any specific government services. The digital system **does not require a card, app or internet access** to redeem the vouchers. The digital tokens will be sent to respective citizens by the government via SMS strings or QR codes to be used for a specific purpose.
- The digital token-style **cashless and contactless medium** is seen as a way to **spot potential gaps in the existing welfare payments infrastructure and fix them**.

How does it work and where can it be used?

- The beneficiaries will be given digital vouchers to access targeted welfare services like medicines and nutritional support, and medical diagnostics under the government's health schemes.
- These vouchers are like e-gift cards, which are prepaid in nature. The code of the cards can be shared either via SMS or the QR code can be shared. These e-vouchers will be **person and purpose-specific**, and they **can't be transferred or cashed out**.
- e-RUPI is **powered by National Payments Corporation of India's UPI platform** and the service has onboarded about a dozen banks to be issuing entities. These include **both private and public banking**

institutions. The beneficiaries will be identified by their mobile number, and the vouchers will be linked to it. The digital voucher can be redeemed only by that individual.

- *Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood.*
- The government also **plans to open the service to private enterprises** so they can use it as part of their employee welfare or benefits programmes. If private companies opt to use e-RUPI for their employees, they will have to approach one of the partner banks with details of specific individuals and the service they would like to avail.

Is e-RUPI a digital currency?

- **No**, the e-RUPI is built for a specific transaction for a service availed at a particular welfare centre. The digital vouchers are **backed by the Indian rupee and are not transferable**. This puts e-RUPI within the framework of a voucher-based payment system rather than a virtual currency, which has a different character.

Benefits for End-users

- **Contactless** - Beneficiary need not carry a print out of the e-voucher;
- **Easy redemption** - It is a **2-step redemption process**;
- **Safe and Secure** - Beneficiaries do not need to share personal details and hence their privacy is maintained;
- **Only mobile phone and e-voucher required** - Users redeeming the voucher need not have a digital payment app or a bank account.

What are some challenges in implementing e-RUPI?

- According to data intelligence firm **Data Reportal**, the number of mobile connections in India as on January 2020 is equivalent to 78% of the total population.
- Enabling the roughly 22% of population to get a mobile phone to access welfare services via e-RUPI will be a problem to be solved.

8) National Edible Oil Mission-Oil Palm

What's in the news?

- Prime Minister Narendra Modi has launched the **National Edible Oil Mission-Oil Palm (NMEO-OP)**, with an investment of over Rs 11,000 crore to boost domestic oilseed production and make the country self-sufficient in cooking oils.
- With **palm oil having 55 per cent share in total edible oil imports**, NMEO-OP would ensure that farmers get all facilities, from quality seeds to technology to promote cultivation of palm and other oil seeds.

Significance

- The Prime Minister said while India has become self-sufficient or Aatamnirbhar in the production of rice, wheat and sugar, it was not enough as the country is dependent on huge imports of edible oils.
- India is the **world's biggest vegetable oil importer**. India produces less than half of the roughly 2.5 million tonnes of edible oil that it consumes annually. It imports the rest, buying **palm oil from Indonesia and Malaysia, soyoil from Brazil and Argentina, and sunflower oil, mainly from Russia and Ukraine**, with the import bill hovering around Rs 75,000 crore per year.
- The increase in cultivation of oil palm will not only benefit farmers but also consumers who would get quality cooking oils at a cheaper rate.

- Besides, it would benefit processors and the entire value chain, thereby creating job opportunities.

9) Strategic Crude Oil Reserves

What are SPRs?

- Strategic Petroleum Reserves (SPR) are **huge stockpiles of crude oil** stored in the **underground rock caverns** (considered safest for storage of Hydrocarbons) to tackle emergency situations and allow a country to tide over short-term supply disruptions.
- They represent a **defence against any event of downfall in future oil production**, including physical or economic actions which disrupt any part of the production process from exploration and development through refining.

Importance of Strategic Petroleum Reserves (SPR) programme

- The **Gulf War in 1990** led to a sharp rise in oil prices and a huge increase in India's imports. During the **post-1991 Indian economic crisis**, foreign exchange reserves could barely finance three weeks' worth of imports, while the government came close to defaulting on its financial obligations. India was able to address the crisis through **policies that liberalized the economy**.
- However, India continued to be affected by **volatility in oil prices**.

In 1998, former Prime Minister Atal Bihari Vajpayee administration proposed the creation of petroleum reserves as a long-term solution for managing the oil market.

Current Status

- In India, Strategic Petroleum Reserves are maintained by **Indian Strategic Petroleum Reserves Limited**, a Special Purpose Vehicle - wholly owned subsidiary of Oil Industry Development Board under the Ministry of Petroleum & Natural Gas.
- Strategic crude oil storages are situated at **Mangalore (Karnataka), Visakhapatnam (Andhra Pradesh) and Padur (Karnataka)** as per Phase I of India's SPR programme. They have fuel storage of a total 5.33 MMT (Million Metric Tonnes) and all the storage facilities have been filled with crude oil. As per the consumption pattern of 2019-20, the total capacity is estimated to provide for about **9.5 days of crude oil requirement**.
- In addition, Oil Marketing Companies (OMCs) in the country have storage facilities for crude oil and petroleum products for **64.5 days**, thus the current total national capacity for storage of crude oil and petroleum products currently is **74 days**.

#IndiaEnergyForum2020

STRATEGIC PETROLEUM RESERVES

Boosting India's energy security

GoI has set up 5.33 MMT of strategic crude oil storages in SPR Phase-I at the following 3 locations:

- 1) Vishakhapatnam- 1.33 MMT
- 2) Mangalore: 1.5 MMT
- 3) Padur: 2.5 MMT

Another 6.5 MMT of strategic crude reserves is being planned in SPR Phase-II at :

- 1) Chandikhole, Odisha - 4MMT
- 2) Padur , Karnataka - 2.5 MMT

Existing Crude Oil Storage Capacity

- 1.33 MMT (Vishakhapatnam, AP)
- 1.5 MMT (Mangalore, Karnataka)
- 2.5 MMT (Padur, Karnataka)

Upcoming Crude Oil Storage Capacity under SPR-II

- 4 MMT (Chandikhole, Odisha)
- 2.5 MMT (Padur, Karnataka)

Padur Mangalore Vishakhapatnam Chandikhole

dpradhanbjp | Dpradhanbjp.com | DharmendraPradhanOdisha

- The **global practice** is to maintain strategic reserves of **at least 90 days of oil imports**.

Why in the news?

- Under the second phase of the Petroleum Reserves programme, the government has recently approved the setting up of two additional commercial-cum-strategic facilities with a total storage capacity of **6.5 MMT** underground storage at **Chandikhole in Odisha (4 MMT)**

- and **Padur (2.5 MMT)**, on Public-private partnership (PPP) Mode.
- The request for proposal for building these storage facilities is under finalisation.
- This would raise India's strategic reserve capacity to **11.83 MMT**, and in times of crisis, India can manage its oil requirement for a specific time period.

Environment

1) Ban on Single-use Plastic

What are Single use Plastics?

- India has defined single-use plastic as **disposable plastics** that are commonly used for packaging and include items intended to be used only once before they are thrown away or recycled.
- These include items such as **carry bags, food packaging, bottles, straws, containers, cups and cutlery.**
- According to a fact sheet released by The Energy and Resources Institute (TERI) and environment ministry in 2018, around 43% of manufactured plastics are used for packaging purposes and most are of single-use.
- Single use plastic **contaminates soil and water; choke waterways and exacerbate natural disasters.** Plastics also **block sewage systems and provide breeding grounds for mosquitoes; release toxic chemicals and emissions** when burned.

Legal Regulations in India

- In order to address the issue of scientific plastic waste management, the **Plastic Waste (Management and Handling) Rules, 2011** were notified in 2011 by the Ministry of Environment, Forest and Climate Change (MOEFCC) which included plastic waste management.
- The Government has notified the **Plastic Waste Management Rules, 2016**, in suppression of the earlier Plastic Waste (Management and Handling) Rules, 2011.

Plastic Waste Management Rules, 2016

The Plastic Waste Management Rules, 2016 aims to

- **Increase minimum thickness** of plastic carry bags from **40 to 50 microns** and stipulate minimum thickness of **50 micron for plastic sheets** to facilitate collection and recycle of plastic waste.

- **Expand the jurisdiction** of applicability of plastic waste management rules from the municipal area to **rural areas.**
- To bring in the **responsibilities of producers and generators**, both in the plastic waste management system and to introduce a **collect back system** of plastic waste by the producers/brand owners, as per **extended producers responsibility.**
- To introduce collection of **plastic waste management fee** through pre-registration of the producers, importers of plastic carry bags/multilayered packaging and vendors selling the same for establishing the waste management system.
- **Phasing out of manufacture and use of non- recyclable multilayered plastic.**
- To promote use of plastic waste for **road construction** as per Indian Road Congress guidelines or **energy recovery, or waste to oil etc.** for gainful utilization of waste and also address the waste disposal issue.

Why in News ?

- **The government has recently notified the Plastic Waste Management Amendment Rules, 2021**, prohibiting identified single use plastic items by 2022.
- The notification is in line with India's stand at the **4th United Nations Environment Assembly** held in 2019, when the country moved a resolution on addressing single-use plastic products pollution by 2022.



Key Provisions of Plastic Waste Management Amendment Rules, 2021

- The **manufacture, import, stocking, distribution, sale and use of notified single-use plastic**, including polystyrene and expanded polystyrene commodities shall be **prohibited with effect from the 1st July, 2022**.
- In order to stop littering due to lightweight plastic carry bags, the **permitted thickness of plastic carry bags** has been **increased from 50 microns to 75 microns** with effect from 30th September 2021 and to **120 microns** with effect from the 31st December, 2022.
- The **plastic packaging waste**, which is not covered under the phase out of identified single use plastic items, shall be collected and managed in an environmentally sustainable way through the **Extended Producer Responsibility (EPR)** of the Producer, importer and Brand owner (PIBO), as per Plastic Waste Management Rules, 2016 and **EPR has been given legal force through Plastic Waste Management Amendment Rules, 2021**.
- The rules constitute a **Special Task Force** for elimination of single use plastics and effective implementation of Plastic Waste Management Rules, 2016.
- A **National Level Taskforce** had also been constituted for taking coordinated efforts to eliminate identified single use plastic items and effective implementation of Plastic Waste Management Rules, 2016.
- The State /UT Governments and concerned Central Ministries/Departments have also been requested to develop a **comprehensive action plan** for elimination of single use plastics and effective implementation of Plastic Waste Management Rules, 2016, and its implementation in a time bound manner.
- The Government has also been taking measures for **awareness generation** towards elimination of single use plastics and effective implementation of Plastic Waste Management Rules, 2016. **Eg: Awareness Campaign of Single Use Plastic 2021, Essay writing competition, India Plastic Challenge Hackathon 2021.**

2) Eco-Sensitive Zone

What are Eco-Sensitive Zones?

- As a general principle, **land falling within 10 kms** (in some exceptional cases it can even go beyond that) of the boundaries of the National Parks and Wildlife Sanctuaries are categorised as Eco-Fragile Zones or Eco-sensitive Zones.
- They are declared under the **Environment Protection Act, 1986**.
- The purpose of declaring Eco-sensitive Zones around National parks and Sanctuaries is to create some kind of "**Shock Absorber**" for the Protected Areas. They would also act as a **transition zone** from areas of high

protection to areas involving lesser protection.

- The activities in the eco-sensitive zones would be of a **regulatory nature rather than prohibitive nature**, unless and otherwise so required.

Deepor Beel Wildlife Sanctuary

- Deepor Beel is located in **Guwahati city**. It is considered as one of the large and important riverine wetlands in the Brahmaputra Valley of **lower Assam**.
- Deepor Beel is an open **freshwater lake** basin connected with a set of inflow and outflow channels.
- It is considered one of the staging sites for **migratory birds** in India; and for some of the large congregations of aquatic birds in Assam during winter.

Why in News?

- The Central government had notified an area around the boundary of Deepor Beel Wildlife Sanctuary as an Ecosensitive Zone to prohibit industries or class of industries and their operations and processes.
- Prohibited activities within the ESZ will include commercial mining, stone quarrying, soil excavation, sand mining, crushing units, setting up of industries causing pollution, major hydro-electric projects, discharge of untreated effluents in either water or land, new wood-based industries, brick kilns, etc.

3) Sambhar Lake needs faster restoration

About Sambhar Lake

- Sambhar Lake is the country's **largest inland saline water body** situated in **Rajasthan**.
- The water is fed to the lake mainly from the rivers **Mendha and Runpangarh**.
- Sambhar lake has been also designated as a **Ramsar site**.
- It attracts thousands of migratory birds like Flamingos every year.

Why in News?

- According to a recent study, the Sambhar Lake which is constantly shrinking with the **degradation of soil and water quality** and a **decline in the population of migratory birds**, needs a faster restoration for conservation of its wetland and salt brine.
- In 2019, more than 20,000 birds belonging to about 10 species which migrate annually to the lake died due to **avian botulism**.
 - *Avian botulism is a neuro-muscular illness caused by a bacteria — Clostridium botulinum, commonly found in the soil, rivers, and seawater.*
- Around 30% of the Sambhar Lake's area had been lost due to mining and other activities, including the illegal salt pan encroachments.
- These events underline the need for urgent action to restore the lake's ecosystem for protecting the birds and biodiversity.

4) Kigali Amendment on phasing down HFCs

Montreal Protocol

- The **Montreal Protocol on Substances that Deplete the Ozone Layer** is an international environmental treaty that **regulates the production and consumption of nearly 100 man-made chemicals referred to as ozone depleting substances (ODS)** including chlorofluorocarbons (CFCs), halons and hydrochlorofluorocarbons (HCFCs).
- The stratospheric ozone layer **protects humans and the environment** from harmful levels of ultraviolet radiation from the sun. The widespread use of ODS had caused a hole in the Ozone layer of the atmosphere, which allowed some harmful radiation to reach the

earth. These radiations were considered potential health hazards.

- Adopted in **1987**, the Montreal Protocol is the **only UN treaty that has been ratified by every country**.
- Under this treaty, all parties have specific responsibilities related to the phase out of the different groups of ODS, control of ODS trade, annual reporting of data, national licensing systems to control ODS imports and exports, and other matters.
- Developing and developed countries have **equal but differentiated**

responsibilities along with **binding, time-targeted and measurable commitments**.

- The Montreal Protocol has been a **far more effective and successful agreement** than the climate change instruments. It has already **resulted in the phase-out of 98.6% of ozone-depleting substances**. The remaining 1.4% is the HCFCs that are in the process of being transitioned.

MONTREAL PROTOCOL CONTRIBUTES TO THE



About Hydrofluorocarbons

- Hydrofluorocarbons (HFCs) are a **group of industrial chemicals** primarily used for **cooling and refrigeration**.
- HFCs are **powerful greenhouse gases** and a substantial number are **short-lived climate pollutants** with a lifetime of between 15 and 29 years in the atmosphere.
- HFCs are widespread in **air conditioners, refrigerators, aerosols, foams and other products**.
- HFCs were introduced as **non-ozone depleting alternatives** to support the timely **phase out of CFCs and HCFCs under Montreal Protocol**.
- While these chemicals **do not deplete the stratospheric ozone layer**, HFCs were found to be extremely potent in causing global warming. Some of them have **high Global Warming**

Potentials (GWPs) ranging from 12 to 14,000.

- So, the HFCs solved one problem, but were contributing in a major way to another. But these could not be eliminated under the original provisions of Montreal Protocol which was meant to phase-out ozone-depleting chemicals only. The Kigali Amendment enabled the Montreal Protocol to **mandate the elimination of HFCs as well**.

Kigali Agreement

- The Parties to the Montreal Protocol reached agreement at their 28th Meeting of the Parties on 15 October 2016 in Kigali, Rwanda. The Agreement particularly aims at **phasing out the production and consumption of Hydrofluorocarbons** which were first introduced as a

substitute to ODSs namely CFCs and Hydrochlorofluorocarbons HCFCs.

- Before the middle of this century, **current HFC use has to be curtailed by at least 85 per cent**. Countries have **different timelines** to do this. **India** has to achieve this target by **2047** while the developed countries have to do it by 2036. China and some other countries have a target of 2045.
- While the reductions for the rich countries have to begin immediately, India, and some other countries, have to begin cutting their HFC use only from 2031.
- The agreement came into force on **1st January 2019** and has been ratified by **119 countries** so far.
- The phasing down of HFCs is expected to prevent the **emission to the tune of 105 million tonnes of greenhouse gases**, which would potentially help avoid a rise in global temperature up to **0.5 degrees Celsius** by the year 2100.
- Kigali Agreement **legally binds the signatory countries** with non-compliance measures.

Why in News?

- The Union Cabinet has given its approval for ratification of the Kigali Amendment for phasing down of ozone layer-depleting hydrofluorocarbons by India under the Montreal Protocol.
- Phasing down HFCs will provide a scope for domestic manufacturing of equipment as well as alternative non-HFC and low-global warming potential chemicals to enable the industry to transition to the low global warming potential alternatives.
- In addition, there would be opportunities to **promote domestic innovation for new generation alternative refrigerants and related technologies**.

India's efforts

- India had played a key role in negotiating the Kigali Amendment. It had fought hard to get an **extended timeline** for itself, and some other countries, for the reduction of HFC use.
- Despite being one of the main architects of the Kigali Amendment, India was the last major country to announce its decision to ratify it. In the meanwhile, however, India had unveiled an ambitious action plan for the cooling industry which accounts for the phase-out of HFCs.
- The **20-year 'India Cooling Action Plan', or ICAP**, released in 2019, describes cooling as a "developmental need" and seeks to address the rising demand in cooling, from buildings to transport to cold-chains, through sustainable actions.
- The plan estimates that the national cooling demand would grow eight times in the next 20 years, which would result in a corresponding five to eight-fold rise in the demand for refrigerants that involve the use of HFCs.
- The ICAP aims to **reduce cooling demand across sectors by 20% to 25% by 2037-38**.
- As part of the ICAP, the government has also announced **targeted R&D efforts** aimed at developing low-cost alternatives to HFCs.

5) SUJALAM Campaign

What's in the news?

- The **Ministry Jal Shakti** has launched "SUJALAM", a 100 days campaign to create more and more **Open Defecation Free (ODF) Plus villages**.
- It will be achieved by undertaking waste water management at village level particularly through **creation of 1 million Soak-pits, to help manage grey water and prevent the clogging of water bodies**.

- The disposal of waste water and clogging of waterbodies in the villages or on the outskirts of the villages remain one of the major problems.
- The campaign will not only **build desired infrastructure** i.e. soak pit for management of greywater in villages but will also **aid in sustainable management of water bodies and in turn would help to revive the water bodies.**
- It would boost the momentum of **Swachh Bharat Mission Gramin phase II** activities through community participation and it will increase awareness about ODF-plus activities.
- The key activities that will be organised under this campaign also include retrofitting toilets where needed and ensuring all newly emerging households in the village have access to toilets.



Related Information

What is grey water?

- Grey water includes used water from most of the domestic activities such as bathing, washing dishes and laundry.
- Grey water is substantially less harmful than **black water** (water that has been contaminated by urine and faecal matter), but it still contains potentially hazardous chemical and biological matter.
- If treated scientifically, grey water can be reused for several activities.

What are soak pits?

- The Soak pit is a pit through which effluent is allowed to seep or leach into surrounding soil. The pit is generally filled with loose stones, bricks or concentrated blocks.

- It is one of the most commonly used techniques to discharge industrial and domestic wastewater safely into the ground and helps with the recharge of groundwater.

About Swachh Bharat Mission

- Swachh Bharat Mission (SBM), launched on 2nd October 2014, is a massive mass movement that seeks to create a Clean India by October 2, 2019 (150th birth anniversary of Mahatma Gandhi).
- It has 2 components - urban and rural.
 1. **SBM Urban** aims for the elimination of open defecation, conversion of unsanitary toilets to pour flush toilets, eradication of manual scavenging, municipal solid waste management and

bringing about a behavioural change in people regarding healthy sanitation practices.

2. **SBM Rural** aims to make India an open defecation free country. It seeks to improve the levels of cleanliness in rural areas through Solid and Liquid Waste Management activities and making Gram Panchayats Open Defecation Free (ODF), clean and sanitised.
- The urban component of the mission is implemented by the **Ministry of Housing and Urban Affairs**, and the rural component by the **Department of Drinking Water and Sanitation, Ministry of Jal Shakti**.

Phase II of SBM Rural

- In 2020, the Union Cabinet approved the **Phase II of the Swachh Bharat Mission (Gramin)** till 2024-25.
- It will focus on Open Defecation Free Plus (ODF Plus), which includes ODF sustainability and Solid and Liquid Waste Management (SLWM). The program will also work towards ensuring that no one is left behind and everyone uses a toilet.

Urban Swachh Bharat Mission 2.0

- In the latest Union Budget, the government unveiled **Urban Swachh Bharat Mission 2.0**. It will stress on further strengthening of the 'swachhata' (cleanliness) campaign of urban India and the government allocated the budget of Rs. 1.41 lakh crore, which will be implemented over five years from 2021.
- The government intends to focus on complete faecal sludge management and wastewater treatment, source segregation of garbage, reduction in single-use plastic, reduction in air pollution, especially waste from construction and demolition, and bio-remediation of dumpsites.

6) Ramsar Convention

About Ramsar Convention

- The Ramsar Convention on Wetlands of International Importance signed in 1971, is an international treaty for the **conservation and sustainable use of wetlands**.
- It is named after the Iranian city of **Ramsar, on the Caspian Sea**.
- It is the only **global treaty** to focus on a single ecosystem (wetlands).
- At present, 171 nations are signatories (including **India**) to the Ramsar Convention. A contracting party agrees to **nominate at least one wetland** in its territory to the List of Wetlands of International Importance based on enumerated criteria.
- In addition, contracting parties agree to manage all their wetlands based on the concept of "**wise use**." Wise use means the maintenance of the ecological character of the wetland and allowance of sustainable use for the benefit of people and the environment.

What are Wetlands?

- A wetland is a land area that is saturated with water, either permanently or seasonally, and it takes on the characteristics of a distinct ecosystem
- The Ramsar Convention defines wetlands as "areas of marsh, fen, peatlands or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water, the depth of which at low tide **does not exceed six metres**".
- **Five major wetland types are generally recognized:**
 1. Marine (coastal wetlands including coastal lagoons, rocky shores, and coral reefs);
 2. Estuarine (including deltas, tidal marshes, and mangrove swamps);
 3. Lacustrine (wetlands associated with lakes);

4. Riverine (wetlands along rivers and streams); and
 5. Palustrine (meaning “marshy” - marshes, swamps and bogs).
- The definition of wetlands is very broad and includes ponds, water storage areas, low-tide coastal zones and all human-made sites such as fish ponds, rice paddies, reservoirs and salt pans.

About Montreux record

- The Montreux Record is a register of wetland sites on the List of Ramsar wetlands of international importance where **changes in ecological character** have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference.
- It is maintained as **part of the Ramsar List**.
- Currently, **Keoladeo National Park** (Rajasthan) and **Loktak Lake** (Manipur) are being kept under the record for taking appropriate steps for ecological restoration.
- **Chilika lake** (Odisha) was placed in the record but was later removed from it.

Why in News?

- **Four more Indian sites, two each from Haryana and Gujarat** have been recognised as wetlands of international importance under the Ramsar Convention, taking the number of such sites in the country to **46**.

Recently Included Sites

Bhindawas Wildlife Sanctuary

- It is the **largest human-made freshwater wetland** situated in Jhajjar, **Haryana**.
- Over **250 bird species** use the sanctuary throughout the year as a resting and roosting site.
- The site supports more than 10 globally threatened species including the endangered Egyptian Vulture, Steppe Eagle, Pallas’s Fish Eagle, and Black-bellied Tern.

Sultanpur National Park

- It is located in Gurgaon district in **Haryana**.
- The site supports more than **220 species** of resident, winter migratory and local migratory waterbirds at critical stages of their life cycles.
- The site supports more than 10 globally threatened species including the **critically endangered sociable lapwing**, and the endangered Egyptian Vulture, Saker Falcon, Pallas’s Fish Eagle and Black-bellied Tern.

Thol Lake Wildlife Sanctuary

- The Thol Lake Wildlife Sanctuary lies in **Gujarat** hosting more than **320 bird species**.
- It supports more than **30 threatened waterbird species**, such as the **critically endangered White-rumped Vulture and Sociable Lapwing**, and the vulnerable Sarus Crane, Common Pochard and Lesser White-fronted Goose.

Wadhvana Wetland

- The Wadhvana Wetland in **Gujarat** is internationally important for its **birdlife** as it provides wintering ground to migratory waterbirds.
- They include some threatened or near-threatened species such as the endangered Pallas’s fish-Eagle, the vulnerable Common Pochard, and the near-threatened Dalmatian Pelican, Grey-headed Fish-eagle and Ferruginous Duck.

7) Renewable energy capacity crosses mile-stone of 100 GigaWatts

What is in the news?

- The Government has announced that India’s total **installed renewable energy capacity has crossed the mile-stone of 100 GigaWatts (GW)**. This assumes importance given that India has a **total installed power generation capacity of 383.73 GW**.

- Today **India stands at 4th position in the world in terms of installed RE capacity** (from sources including wind, small hydro, solar & bio power), **5th in solar and 4th in wind in terms of installed capacity**.
- The 100 GW installed renewable energy generation capacity **does not include the power generated by the large hydroelectric projects**, which if added would increase the installed RE generation capacity to **146 GW**.

Significance

- Despite **India's per capita emission being one-third of the world average**, the country has been building up its green portfolio.
- While 100 GW has been installed, 50 GW is under installation and 27 GW is under tendering. India has also **enhanced its ambition to install 450 GW of renewable energy capacity by 2030**.
- This will also help India greatly in its fight against climate change as India plans to **reduce its carbon footprint by 33-35 per cent from its 2005 levels by 2030 and meet 40 per cent of its electricity needs from non-fossil fuel sources by then**, as part of its Nationally determined contributions (NDCs) to the United Nations Framework Convention on Climate Change adopted by 195 countries in Paris in 2015.

8) World Elephant Day

About Elephants

- There are two species of elephants, **African and Asian**, and while they are similar in physiology, they are too biologically different to interbreed.
- According to IUCN, the Asian elephant is classified as **endangered** with less than 40,000 remaining worldwide.

Man-Animal conflict

- **India has the largest number of wild Asian Elephants**, estimated at 29,964 according to the **2017 census**

by **Project Elephant** which is almost 60% of the global Asian Elephant population.

- **Project Elephant** was launched by the Government of India in the year 1991-92 as a Centrally Sponsored Scheme to provide financial and technical support to major elephant bearing States in the country for protection of elephants, their habitats and corridors.
 - A similar initiative is the **Monitoring the Illegal Killing of Elephants (MIKE) programme** that tracks trends in information related to the illegal killing of elephants from across Africa and Asia, to monitor effectiveness of field conservation efforts.
 - The MIKE Programme was established by the **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)** in 1997.
 - Among the states, the highest population was recorded in **Karnataka** (6,049), followed by Assam and Kerala.
 - Over 500 people and 100 elephants die every year due to conflict with each other, which include poaching for ivory or meat, poisoning, electrocution and collision with trains, while property worth millions are damaged.
 - **Loss of natural habitat and fragmentation** have been bringing wild elephants closer to human habitations, sparking human-elephant conflicts.
- ### Why in the news?
- World Elephant Day was celebrated on August 12 to raise awareness on the preservation and

protection of the world's elephants.

Challenges

- There are around 30 elephant reserves across the country covering about 65,000 sq km but the reserves and corridors have poor legal protection, which means that forest land in such areas can easily be **diverted for any non-forest purpose** like infrastructure development projects etc.
- **Population management** is the key issue because only 22% of the elephant habitat is under protected area. Majority of elephant corridors are under non-protected areas due to which elephants migrate to the other areas because it requires fodder around 300kg.
- In Eastern India, due to various problems like mining, increasing

cultivation, decline in bamboo forest cover, the human-elephant issue has reached its peak.

Way Forward

- The pre-existing corridors need to be enlarged. The **translocation of animals** from a densely populated region to a less populated region can help in minimising the conflict to some extent.
- Wildlife management should be prioritized along with the economic development and decisions regarding both should go hand in hand along with various scientific decisions.
- Mitigation measures should be implemented by policy makers as well as via community participation.

Agriculture

1) Fair and Remunerative Price

What's in the news?

- Fair and Remunerative Price (FRP) is an arrangement for the **price to be paid to sugarcane farmers by the Sugar Mills** and is announced each year by the Centre, on the advice of **Commission for Agricultural Costs and Prices (CACP)** and after consultation with State Governments.
- The system **assures margins on account of profit and risk to farmers**, irrespective of the fact whether sugar mills generate profit or not and is not dependent on the performance of any individual sugar mill.
- Under the FRP system, the price paid to farmers for sugarcane is **not linked to the profits** generated by sugar mills. Instead, **FRP is based on the recovery rate of sugar from sugarcane**.
- In order to ensure that higher sugar recoveries are adequately rewarded and considering variations amongst sugar mills, the **FRP is linked to a basic recovery rate of sugar**, with a **premium payable to farmers for higher recoveries of sugar from sugarcane**.

What is the State Advised Price?

- State Advised Price or SAP is the price **announced by the state government, over and above the FRP**.
- Since sugar pricing comes under the **concurrent list**, both the centre and the state have the power to fix sugarcane prices — while the centre's price is the minimum price, states can set an SAP that is **usually higher than the centre's FRP**.

How are FRP and SAP different from MSP?

- While FRP and SAP are different versions of the **price for sugarcane that need to be paid by the mills to**

farmers, MSP or Minimum Selling Price is the **assured price of sugar for mills**.

- **Prices of sugar are market driven** and depend on demand & supply of sugar. However, to ensure that the industry gets, at least, the minimum cost of sugar production so as to clear cane price dues to farmers, the concept of sugar MSP has been introduced since 2018.
- MSP of sugar is fixed taking into account the components of Fair & Remunerative Price of sugarcane and minimum conversion cost of the most efficient mills.

How is Fair and Remunerative Price calculated?

- Factors that are taken into account for calculating FRP, other than sugar recovery, include —
 - cost of production of sugarcane,
 - general trend of agricultural commodities' prices,
 - availability of sugar to consumers at a fair price.
- Reasonable margins for sugarcane growers are also to be taken into consideration, as per the amended provisions of the Sugarcane (Control) Order, 1966.

Why in News?

- The Central government has hiked the Fair and Remunerative Price of sugarcane by ₹5 a quintal, setting the FRP at ₹290 a quintal for the 2021-22 sugar season, which runs from October to September.
- Despite demands from sugar mills, however, the Centre refused to hike the Minimum Selling Price that they can sell the processed sugar, citing consumer interests.
- The FRP is **linked to the basic recovery rate of sugar (10%), and those with a recovery rate higher than 10% get a higher FRP**.

Flora & Fauna

1) White Bellied Heron

About

- The White-bellied Heron is a **very rarely found species**. This bird has a large blackish bill, 15-18 cm long, and is mostly dark greyish, with a white throat, a white belly, and a bent neck.
- It usually feeds by standing in fast flowing rivers and also uses slow moving streams and grassy marshes.
- Its recent known distribution is **India (Arunachal Pradesh, Assam), northeast Bangladesh, Bhutan**. This range is a substantial reduction from what is suspected to have been its historic range.
- With roughly 200 White-Bellied Herons in the world today, herons are among the 50 rarest bird species on earth.
- Attacks on birds and their eggs by predators have been a major cause in their reduction. The pressure on the birds has further risen with the lack of scientific approach and scanty awareness among the local communities.

- **Protection Status:** IUCN Red List: **Critically Endangered**; Wildlife Protection Act (1972): **Schedule I**.



Why in News?

- Scientists have found that loss of habitat in Arunachal Pradesh is forcing the White-bellied Heron to lead an isolated lifestyle deep inside forests, and further pushing this critically endangered bird towards extinction.
- Their isolation prevented these birds from learning about new sites and food sources from fellow foragers, which could have enhanced chances of their survival.

Science and Technology

1) Smog tower

What is smog?

- Smog is air pollution that reduces visibility.
- It was first described over 5 decades ago as a **mixture of smoke and fog**, hence the name "smog"—but today it has a more specific definition and composition.
- Smog is **made up of many chemicals including nitrogen oxides (NO_x), sulphur dioxide (SO_x), carbon monoxide (CO), and volatile organic compounds (VOCs)**, but the **two main components** of smog are **particulate matter (PM)** and **ground-level ozone (O₃)**.
- Particle pollution includes:
 - **PM₁₀** : inhalable particles, with diameters that are generally 10 micrometers and smaller; and
 - **PM_{2.5}** : fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller.
- Today, most of the smog we see is **photochemical smog**. Photochemical smog is **produced** when **sunlight reacts** with **nitrogen oxides and at least one volatile organic compound (VOC)** in the atmosphere.
- Nitrogen oxides come from car exhaust, coal power plants, and factory emissions. VOCs are released from gasoline, paints, and many cleaning solvents. When sunlight hits these chemicals, they form airborne particles and ground-level ozone which appears as smog.

Why is it harmful?

- Smog causes **multiple health problems**, such as difficulty in breathing, eye irritation, asthma, reduced immunity to lung infections, and colds that can be fatal in children.
- The **ozone** in the smog also **inhibits plant growth**. It can cause widespread

damage to crops and forests, and the haze reduces visibility.

- When inhaled, smog irritates our airways, increasing our risk of serious heart and lung diseases. These health risks are why many cities monitor smog levels.

Why in News?

- The Delhi government recently inaugurated the city's first "smog tower" to help purify polluted air.
- The tower has been developed by experts at the University of Minnesota.

What is a smog tower?

- Smog towers are structures designed as large-scale air purifiers to reduce air pollution.
- Smog towers work on the **principle of HEPA filtration or air ionisation technology** to remove tiny dust particles (particulate matter). That is, air flowing through a smog tower passes through filters to provide clean air coming out of it.
- **Carbon nanofibres** are a crucial component of the large-scale filters in these towers.
- It is expected to **reduce 50% of the particulate matter load** in an area of 1 kilometre in the wind's direction, as well as 200 metres along the tower's sides and against the wind's direction.

Need for a smog tower in Delhi

- The **World Air Quality report** by Swiss technology company IQAir has named **Delhi** as the **world's most polluted capital in 2021**.
- During **winter**, pollution levels in Delhi rise considerably, reaching roughly ten times the WHO's recommended levels. This is worrisome as the city's sources of emissions — **construction, industrial, and vehicular pollution** are very constant.
- Smoke from **stubble-burning** in northwest states exacerbates the situation, which is exacerbated by

unfavourable climatic circumstances such as calm breezes, cold temperatures, and fewer sunny days at the onset of winter.

2) Food Fortification

What is Food Fortification?

- Fortification is the **addition of key vitamins and minerals** such as iron, iodine, zinc, Vitamin A & D to staple foods such as rice, milk and salt to improve their nutritional content. These nutrients may or may not have been originally present in the food before processing.
- It is a **cost-effective** strategy for improving diets and for the prevention and control of micronutrient deficiencies.
- It can be **carried out by food manufacturers, or by governments** as a public health policy which aims to reduce the number of people with dietary deficiencies within a population.

Need for Food Fortification

- **70% of people in India do not consume enough micronutrients** such as vitamins and minerals.
- According to the **National Family Health Survey (NFHS-4) 2015-16**:
 - 58.4 percent of children (6-59 months) are anaemic
 - 53.1 percent women in the reproductive age group are anaemic
 - 35.7 percent of children under 5 are underweight.
- **Deficiency of micronutrients** or micronutrient malnutrition, also

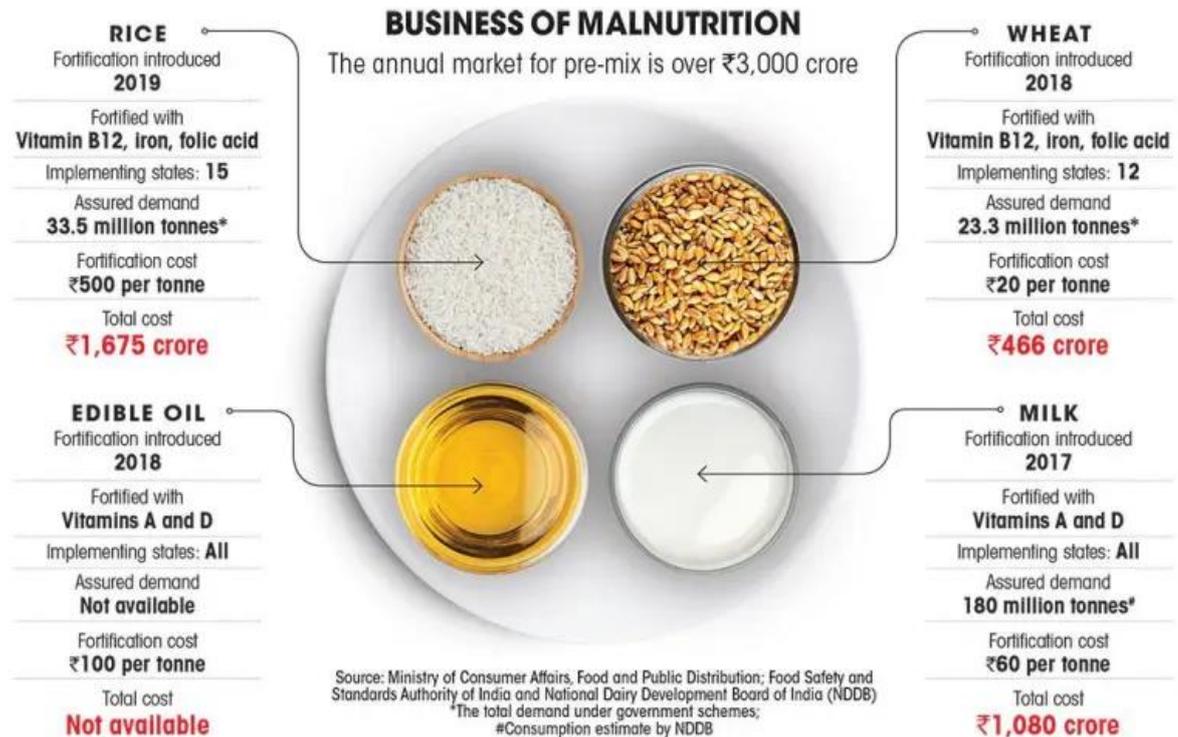
known as “**hidden hunger**”, is a serious health risk.

- Unfortunately, those who are economically disadvantaged do not have access to safe and nutritious food. Others either do not consume a balanced diet or lack variety in the diet because of which they do not get adequate micronutrients.
- Often, there is **considerable loss of nutrients during the processing of food**. One of the strategies to address these problems is fortification of food.

Benefits of Food Fortification

- Since the nutrients are added to staple foods that are widely consumed, this is an **excellent method to improve the health of a large section of the population**, all at once.
- It **does not require any changes in food habits and patterns of people**. It is a **socio-culturally acceptable way** to deliver nutrients to people.
- It **does not alter the characteristics of the food**—the taste, the feel, the look.
- It can be implemented quickly as well as show results in **improvement of health in a relatively short period of time**.
- The **Copenhagen Consensus** estimates that every **1 Rupee spent on fortification results in 9 Rupees in benefits to the economy**. Thus it has a **high benefit-to-cost ratio**.

How does the government use food fortification in various schemes?



- In 2016, FSSAI operationalized the **Food Safety and Standards (Fortification of Foods) Regulations, 2016** for fortifying staples namely
 - **Wheat Flour and Rice with Iron, Vitamin B12 and Folic Acid,**
 - **Milk and Edible Oil with Vitamins A and D and**
 - **Double Fortified Salt with Iodine and Iron**
- The '+F' logo has been notified to identify fortified foods.
- The **National Nutritional Strategy of 2017** included **food fortification** as one of the measures to **address anaemia, vitamin A, and iodine deficits.**
- The Government is distributing **fortified rice** through the **Integrated Child Development Services and Mid Day Meal Scheme.**

Why in News?

- Group of scientists and activists have written to the Food Safety and Standards Authority of India (FSSAI), warning of the adverse

impacts of food fortification on health and livelihoods.

Concerns

- Scientists have cited multiple studies to show that **dietary diversity and higher protein consumption are key to solving undernutrition in India, rather than adding a few synthetic micronutrients** which could harm the health of consumers.
- One major problem with chemical fortification of foods is that **nutrients don't work in isolation but need each other for optimal absorption.** Undernourishment in India is caused by **monotonous cereal-based diets with low consumption of vegetables and animal protein.**

What could be alternatives to food fortification?

- **Rice bran**, a rich source of numerous micronutrients, would reach people if less processed or unpolished rice was included in the public distribution system.
- **Promoting Kitchen Gardens:** Organic kitchen gardens (growing

of fruits and vegetables at the backyard of house by using kitchen waste water) produce fruits and vegetables that increase micronutrients.

- Increasing the **intake of animal-based foods and fruits**. A variety of natural diets is required to provide the normal population's micronutrient needs, according to the National Institute of Nutrition.
- **Farming practices like Amrut Krishi, Fukuoka's "Natural Farming"** and other organic agricultural methods would result in improved food nutrition.
 - *Amrut Krushi is a way to do intensive agriculture in an organic, sustainable and inexpensive way. It uses scientific methods to figure out the maximum possible yield in a particular area with maximum nutrition.*
 - *"The Fukuoka Method" or "the natural way of farming" or "Do-Nothing Farming" is the system based on the recognition of the complexity of living organisms that shape an ecosystem and deliberately exploiting it.*
- **Breastfeeding** with correct latching practices has the potential to have a significant influence on nutrition insufficiency in the first 1,000 days.

3) IMF warns against adoption of Cryptocurrencies

About Cryptocurrencies

- A **cryptocurrency** is a **digital asset designed to work as a medium of exchange** that uses strong cryptography to **secure financial transactions**, control the creation of additional units and verify the transfer of assets.

- It is a **digital representation of value** that can be digitally traded and functions as a medium of exchange but, unlike fiat currency like the rupee, **it is not legal tender** and does **not have the backing of a government**.
 - *Fiat money is a currency that lacks intrinsic value and is established as a legal tender by government regulation.*
 - *'Legal tender' is the money that is recognised by the law of the land, as valid for payment of debt. It must be accepted for discharge of debt.*
- Blockchain technology **enables the existence of cryptocurrencies** (among other things). This technology has been **exploited by the crypto currencies such as Bitcoin, Ripple, Litecoin** etc as blockchain data is secured using cryptography.

Why in News?

- The International Monetary Fund (IMF) has warned against the adoption of Cryptocurrency, saying it **can threaten financial stability of emerging markets**. According to the IMF, Crypto currency poses new challenges to financial stability and consumer protection risks remain substantial given limited or inadequate disclosure and oversight.
- The total market value of all the crypto assets surpassed 2 trillion dollars as of September 2021, a 10-fold increase since early 2020.
- IMF's financial experts said, **anonymity** of crypto assets also creates **data gaps for regulators** and can **open unwanted doors for money laundering, as well as terrorist financing**. Although

authorities may be able to trace illicit transactions, they **may not be able to identify the parties to such transactions.**

- Additionally, the crypto ecosystem falls under different regulatory frameworks in different countries, **making coordination more challenging.**

About IMF

- The International Monetary Fund was conceived in 1944 at the **United Nations Bretton Woods Conference** in New Hampshire, United States.
- The IMF and the World Bank are called **Bretton Woods twins.**
- The IMF is a permanent observer at the UN.
- It is an organization of 190 countries. **India is a founder member** of the IMF.
- The mandate of the IMF as follows:
 - To promote international monetary cooperation;
 - To facilitate the expansion and balanced growth of international trade;
 - To promote exchange stability;
 - To assist member countries in correcting maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity;
 - To assist in the elimination of foreign exchange restrictions which hamper the growth of world trade.

4) Deep Ocean Mission

What is it?

- It is an initiative spearheaded by the **Ministry of Earth Sciences (MoES)** in collaboration with ISRO, DRDO, Department of Atomic

Energy (DAE), Council of Scientific and Industrial Research (CSIR), Department of Biotechnology (DBT) and the Indian Navy.

- The Indian government wants to understand the oceans better, both as a resource and for the conservation of marine biodiversity.
- One of the main aspects of the mission will be **design, development and demonstration of human submersibles** (in the image below).



- Another aspect is **exploring the possibility of deep sea mining and developing necessary technologies.**
- Under the mission, studies are planned at depths close to 6,000 metres under six major components —
 1. Mineral exploration on the sea-bed;
 2. Study and mapping of biodiversity;
 3. Study of climate change;
 4. Exploration of marine biology and developing allied courses,
 5. Training; development and demonstration of ocean exploration
 6. Off-shore technologies for future.

Significance of the mission

- The mission forms a part of the **Blue Economy** envisioned to be developed by 2030, which will

place India among select countries — US, France, Japan, Russia and China — to have special missions dedicated for ocean studies.

- It is a **strategic and geo-political move** in order to further strengthen India's position in the Indian Ocean region.
- Globally, **only 11 percent of marine species have been identified**. The deep ocean species are even less explored. Hence it will be helpful in identifying the species and knowing more about **climate change**.

Economic Potential

- It will enable India to develop capabilities to **exploit resources in the Central Indian Ocean Basin (CIOB)**.
- CIOB reserves contain deposits of metals like iron, manganese, nickel and cobalt. It is envisaged that **10% of recovery of that large reserve can meet the energy requirement of India for the next 100 years**.
- India has also been allotted 75,000 square kilometres in the CIOB by the **UN International Sea Bed Authority (ISA)** for exploration of **poly-metallic nodules**.
 - *The ISA is an institution set up under the **UN Convention on Law of the Sea** to which **India is a Party**.*
 - *Polymetallic nodules are rounded accretions of **manganese and iron hydroxides** that cover vast*

areas of the seafloor, but are most abundant on abyssal plains at water depths of 4000-6500 metres. They form through the aggregation of layers of iron and manganese hydroxides around a central particle (such as a shell or small rock fragment), and range in size from a few millimeters to tens of centimeters.

- *Growth of these nodules is extremely slow, at a rate of millimetres per million years, and they remain on the seafloor surface, often partially buried in a thin layer of sediment.*
- *The composition of nodules varies with their environment of formation, but in addition to manganese and iron, they can contain **nickel, copper and cobalt** in commercially attractive concentrations as well as traces of other valuable metals such as **molybdenum, zirconium and Rare Earth Elements**. They are viewed as potential resources to take care of the depleting land resources and increasing demand of these metals.*

Why in News?

- The Government has approved the Deep Ocean Mission at a total budget of Rs. 4077 Cr for 5 years.

Reports and Indices

1) Periodic Labour Force Survey

About PLFS

- In India, the **National Statistical Office (NSO)** has been **quinquennially** (over a period of five years) collecting data on employment and unemployment but from **2017** onwards, the Periodic Labour Force Survey (PLFS) was **launched by the NSO**.
 - *The NSO is a wing of the Ministry of Statistics and Programme Implementation.*
- It aimed to provide **quarterly employment and unemployment data**.
- Under the PLFS, households are selected in **both rural and urban areas** by providing 75 per cent weightage to households where at least one member has secondary education (Class 10) or above.
- PLFS is India's **first computer-based survey**, which gives estimates of Key employment and unemployment Indicators like the Labour Force Participation Rates (LFPR), Worker Population Ratio (WPR), Unemployment Rate (UR), etc. These indicators are defined as follows:
 - ✓ **Labour Force Participation Rate (LFPR):** LFPR is defined as the percentage of persons in the labour force (i.e. working or seeking or available for work) in the population.
 - ✓ **Worker Population Ratio (WPR):** WPR is defined as the percentage of employed persons in the population.
 - ✓ **Unemployment Rate (UR):** UR is defined as the percentage of persons unemployed among the persons in the labour force.
 - ✓ **Activity Status- Usual Status:** The activity status of a person is determined on the basis of the

activities pursued by the person during the specified reference period. When the activity status is determined on the **basis of the reference period of the last 365 days preceding the date of survey**, it is known as the usual activity status of the person.

- ✓ **Activity Status- Current Weekly Status (CWS):** The activity status determined on the **basis of a reference period of last 7 days preceding the date of survey** is known as the current weekly status of the person.

- The PLFS also gives the **distribution of educated and unemployed people**, which in turn can be used as a basis for skilling of youth to make them more employable by industry.
- It also provides data on the **earnings of different segments of workers**.

Objective of PLFS

- The objective of PLFS is primarily twofold:
 - to estimate the key employment and unemployment indicators (viz. Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate) in the **short time interval of three months for the urban areas only in the Current Weekly Status**.
 - to estimate employment and unemployment indicators in **both Usual status and CWS in both rural and urban areas annually**.

Why in News?

- The third annual round of the Periodic Labour Force Survey conducted during July 2019-June 2020 was released recently.
- For the report, a little over one lakh households and around 4.2 lakh persons, both in urban and rural areas, were surveyed.

Highlights of the Survey

- Labour indicators recorded an all-round improvement in 2019-20 compared with the previous two years.
- The survey shows that the **unemployment rate fell to 4.8%** in 2019-20. In 2018-19, it stood at 5.8% and 6.1% in 2017-18.

Labour indicators



Source: MoSPI

- The **worker population rate improved to 38.2%** in 2019-20 compared with 35.3% in 2018-19 and 34.7% in 2017-18.
- **Labour force participation ratio also increased to 40.1%** in 2019-20 from 37.5% and 36.9%, respectively, in the last two years. The higher the LFPR, the better.
- The data showed the **jobless rate for both male and female fell to 5.1% and 4.2%**, respectively, in 2019-20 from 6% and 5.2% in 2018-19.

2) Financial Inclusion Index

What is in the news?

- The Reserve Bank of India has created a **composite Financial Inclusion Index (FI-Index) to capture the extent of financial inclusion across the country.**

Parameters

- The FI Index captures information on **various aspects of financial inclusion in a single value ranging between 0 and 100**, where 0 represents complete financial exclusion and 100 indicates full financial inclusion.

- The FI Index comprises **three broad parameters** (weights indicated in brackets):
 1. **Access** (35 per cent),
 2. **Usage** (45 per cent), and
 3. **Quality** (20 per cent)
- Each of these consists of various dimensions, which are computed based on a number of indicators.
- The index, which has been **constructed without any 'base year'** and as such reflects cumulative efforts of all stakeholders over the years towards financial inclusion, is responsive to ease of access, availability and usage of services, and quality of services.
- A unique feature of the index is the **Quality parameter** that captures the **quality aspect of financial inclusion as reflected by financial literacy, consumer protection, and inequalities and deficiencies in services.**
- The RBI announced that the index will be published **annually** in July every year. It has been conceptualised as a comprehensive index incorporating details of banking, investments, insurance, postal as well as the pension sector in consultation with government and respective sectoral regulators.

Present Status

- The first reading of the RBI's annual Financial Inclusion Index for the period ended March 2021 has come in at **53.9**, a little over the halfway mark, with 100 being the full financial inclusion score.
- It implies that **India is only at the halfway point in meeting financial inclusion goals.**
- The central bank said the FI Index reading for the period ended March 2017 was 43.4.

3) North-Eastern Region District SDG Index

What's in the news?

- NITI Aayog has released the first edition of the North-Eastern Region District Sustainable Development Goals (SDGs) Index.
- It is designed and developed by NITI Aayog in collaboration with the **Ministry of Development of North Eastern Region (DoNER)** with technical inputs from the **United Nations Development Programme** and consultations with all the north-eastern States – who are the primary stakeholders of this tool.

SDG Index

- The Index measures the **performance of the districts of the eight States** of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura **on the SDG and their corresponding targets**, and ranks the districts based on the same.
- These goals include no poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, and reduced inequality.
- All districts have been placed in one of **four categories** — aspirant (0-49), performer (50-64), front-runner (65-99), and achiever (100) — according to their performance vis a vis the goals in the report.
- The index offers **insights into the social, economic, and environmental status** of the region and its districts in their march towards achieving the SDGs.
- The index is based on **NITI Aayog's SDG India Index** – the principal and official tool for monitoring progress on SDGs at the national, State, and Union Territory level.

Rankings

- **East Sikkim**, with a score of 75.87, ranks first in the region followed by

districts **Gomati and North Tripura** (score 75.73) at the second position.

- The North Eastern Region District SDG Index will help in **evidence-based planning, resource allocation**, both financial as well as others, and **effective supervision and monitoring of developmental efforts** for focused and balanced regional development.
- Of the 103 districts considered for ranking, 64 districts belonged to the **front runner category** while 39 districts were in the **performer category** in the composite score and ranking of districts.
- **All districts in Sikkim and Tripura fell in the front runner category**, while there were **no districts in the aspirant or achiever categories**.

4) IPCC's Sixth Assessment Report

What's in the news?

- The Intergovernmental Panel on Climate Change (IPCC) has released its Sixth Assessment report titled **"Climate Change 2021- The Physical Science Basis"**.
 - *IPCC is the United Nations body for assessing the science related to climate change.*
 - *It was created in 1988 by the **World Meteorological Organization (WMO)** and the **United Nations Environment Programme (UNEP)**.*
 - ***Aim:** To provide governments at all levels with scientific information that they can use to develop climate policies. It provides regular assessments of the scientific basis of Climate change, its impacts and future risks and options for adaptation and mitigation.*

Key Findings

Rising Global Average Temperature

- The report highlighted that consuming **fossil fuels has combined with agriculture** to push **methane and**

nitrous oxide to records for at least the last 800,000 years. These greenhouse gases have **elevated the global average temperature** by about **1.1 degrees Celsius**.

- Of the 1.1 degrees Celsius of warming since the pre-industrial era, the IPCC finds that **less than 0.1 degrees Celsius is due to natural forcings**, such as volcanos or variations in the sun.
- It noted that **carbon dioxide** has been and will continue to be the **dominant cause of global warming** under all greenhouse gas emissions scenarios.

Adverse Impacts

- The warming of the ocean would lead to a **rise in sea levels, leading to frequent and severe coastal flooding in low-level areas**.
- The report noted that the planet will irrevocably head towards warming by **1.5 degrees Celsius over pre-industrial times in the next two decades** stating that human activities are causing climate change.

- Many consequences of climate change will become irreversible over time, most notably **melting ice sheets, rising seas, Biodiversity loss and more acidic oceans** and the impacts will continue to mount and compound as emissions increase.
- The report finds **carbon sinks such as land and water are at great risk** due to increasing temperature. Eg: Amazon Rainforest.
- According to IPCC's study, the **land sink eventually turns into a source**, emitting CO2 instead of absorbing it. This can lead to **runaway warming**.
- In short, the new report attributes catastrophic events to sustained global warming, particularly the frequency and intensity of hot extremes, marine heatwaves, heavy precipitation, agricultural and ecological droughts, proportion of intense tropical cyclones, reductions in Arctic Sea ice, snow cover and permafrost.

Explaining the 2021 IPCC Report

When Might Temperature Thresholds Be Reached?



Notes: *SSPI-1.9 **SSP5-8.5

Source: IPCC.

21.08.05

 WORLD RESOURCES INSTITUTE

Region Specific Impacts of Climate Change

- The IPCC report shows that **no region will be left untouched by the impacts of climate change**, with enormous human and economic costs that far outweigh the costs of action.
- Southern Africa, the Mediterranean, the Amazon, the western United States and Australia will see increased **droughts and fires**, which will continue to affect livelihoods, agriculture, water systems and ecosystems.
- **Changes in snow, ice and river flooding** are projected to impact infrastructure, transport, energy production and tourism in North America, the Arctic, Europe, the Andes and more.
- **Storms** will likely become more intense over most of North America, Europe and the Mediterranean.
- With a 7,517-km coastline, India would face significant threats from the **rising seas** and across the port cities of Chennai, Kochi, Kolkata, Mumbai, Surat and Visakhapatnam, 28.6 million people would be exposed to **coastal flooding** if sea levels rise by 50 cm.
- India's **agriculture and manufacturing sectors** will be impacted drastically due to increasing temperature.
- The **Indian Ocean is warming at a higher rate** than other oceans due to which India will witness **increased heat waves and flooding**, which will be the irreversible effects of climate change.
- The current overall global warming trends are likely to lead to an **increase in annual mean precipitation over India**, with more severe rain expected over southern India in the coming decades.
- **Monsoon extremes** are likely to increase over India and South Asia,

while the frequency of short intense rainy days are expected to rise.

Impact of Warming Climate on Indian Agriculture and Industries

- Rising temperatures have already made Indian agriculture **more resource hungry**. According to ongoing studies by the **Indian Council of Agricultural Research (ICAR)**, farming now consumes up to **30% more water due to "high evaporative demand and crop duration due to forced maturity" in states such as Andhra Pradesh, Punjab and Rajasthan.**
- According to the **2017-18 Economic Survey**, extreme weather and drought, when rainfall loss is greater than 40% than the median, will cut **farmer incomes by up to 14%.**
- Higher temperatures can **cut productivity or output per worker**. According to New Delhi's **Indian Statistical Institute**, "For every **one-degree Celsius rise in annual temperatures** over average temperatures for the 1980-2000 period, Indian industrial plants likely produced **2% less revenue.**"
- Experts have warned that Changes wrought by the climate crisis will have economy-wide repercussions in India if not mitigated, shrivelling both **agriculture and industry.**

India Vs Global Emissions

- **India has contributed less than 5% of global cumulative emissions** to date, **with per capita annual emissions a third of the global average.**
- India is also the **only nation among the G20 with commitments under the Paris Agreement that are even 2°C warming-compatible.**

Climate Change accelerated by Methane Emissions

- According to IPCC, Methane (CH₄) emissions are responsible for around

30 percent of warming since the pre-industrial era on a global scale.

- Methane is an **invisible and odourless gas also super-potent greenhouse gas** and a powerful pollutant which traps **80 times more heat than CO₂**.
- It is a hydrocarbon and a primary component of liquefied natural gas (LNG).

Sources of Methane

- It is emitted from a variety of **human as well as natural sources**.
- Some of these sources are **landfills, oil and natural gas systems, agricultural activities, coal mining, stationary and mobile combustion, wastewater treatment and certain industrial processes**.

Top Methane emitting Countries

- The **United States and the European Union (EU)** account for more than a one third of global consumption of natural gas followed by **Brazil, Russia, China, Indonesia, Nigeria, Mexico and India**.

CO₂ V/S CH₄

- A **single CO₂ molecule causes less warming** than a methane molecule, but **lingers for hundreds of years** in

the atmosphere whereas **methane disappears within two decades**.

Way Ahead

- A goal for **deep emission cuts** should be set by all the countries.
- IPCC calls for **reducing methane emissions** in the next 10 years if the world is to meet its climate goals.
- A Commitment by the countries to strive for achieving **net zero emissions** that no additional greenhouse gases are emitted by 2050.
- A path towards **decarbonising the economy** is the need of the hour.
- The **use of natural gas** would have to fall by more than half its current level.
- **Investments in research** need to be increased sharply.
- A serious push to the **mobilisation of adequate climate finance** is crucial at this juncture.

Organisations

1) United Nations Security Council

About UNSC

- The United Nations Security Council (UNSC) was established in 1946 as **one of the six principal organs** of the UN. It is generally viewed as the apex of the UN system.
- It is responsible for the **maintenance of international peace and security**.
- Its powers include the establishment of peacekeeping operations, the establishment of international sanctions, and the authorization of military action through Security Council resolutions.
- It is the only UN body with the authority to issue **binding resolutions** to member states.

Membership

- UNSC consists of **15 Members**.
- The council has **five permanent members** (P-5) United States, Russia, China, United Kingdom and France.
- These permanent members can **veto** any substantive Security Council resolutions, including those on the admission of new member states.
- The Security Council also has **10 non-permanent members**, elected on a **regional basis** as follows:
 - five for African and Asian States;
 - one for Eastern European States;
 - two for the Latin American and Caribbean States; and
 - two for Western European and other States.
- Each year the 193-member UN General Assembly (UNGA) elects

five non-permanent members for a **two-year term**.

- The body's **presidency rotates monthly among its members**.

Vote and Majority Required

- Each member of the Security Council shall have **one vote**.
- Decisions of the Security Council on **procedural matters** shall be made by an **affirmative vote of nine members**.
- Decisions of the Security Council on **all other matters** shall be made by an **affirmative vote of nine members including the concurring votes of the permanent members**.
- However, any member, whether permanent or nonpermanent, must abstain from voting in any decision concerning the peaceful settlement of a dispute to which it is a party.

Why in News?

- India is set to focus attention on three major areas—**maritime security, peacekeeping and counter-terrorism**, as it assumed the presidency of the United Nations Security Council for the month of August.
- **India joined the UNSC in January 2021 for a two year term as one of the 10 rotating non permanent members**.
- As part of its new role as president of the UNSC that all 15 members get in rotation, India will decide the agenda of the UN's highest decision making body whose resolutions and directives are binding on all member states. India will also coordinate important meetings on a range of issues during August.

India's quest for permanent seat in UNSC

- For decades, India has sought a comprehensive reform of the UNSC and permanent membership at the Council along with Germany, Japan and Brazil.
- In recent years, New Delhi has made the theme of “**reformed multilateralism**” central to its diplomacy—calling the UN structure that came into existence in the immediate aftermath of World War 2 “**anachronistic**” and **in need of urgent change**.
- The arguments put forward by India centered on four aspects for making the Council more representative: **Expansion of Membership, Veto power, Regional Representation & Relationship Between Security Council and General Assembly**.

Expansion of Membership

- In India’s eyes, no reform of the UN is complete without the composition of the Security Council changing to reflect contemporary realities of the twenty-first century.
- This requires **expansion in the membership** of the Security Council in both the permanent and non – permanent categories.
- India has also highlighted the need of **Africa** to be represented in both categories.

Veto power

- On the question of veto, the Indian position is fully aligned with **G4, L.69** and Africa who have called for the **abolition of veto**.
 - *The G4 nations comprise Brazil, Germany, India and Japan which support each other's bids for permanent seats on the UNSC.*
 - *L.69 is a group of developing countries from Africa, Latin America and the Caribbean, Asia and the Pacific. They*

form a major bloc that is united by the common cause of achieving the lasting and comprehensive reform of the UNSC.

Regional Representation

- On the question of regional representation, India has argued for an **equitable geographical representation** and the urgent need for mitigating the non-representation and under-representation of some regions in both the permanent and the non-permanent categories.
- The UN has three of the five permanent members from one region alone while the regions of Africa, Latin America, three-fourths of Asia including the Arab states, the entire Central and Eastern Europe, the Caribbean states and the Small Island developing states remain excluded from the functioning of the Security Council.
- The Security Council, for India, needs to reflect contemporary realities and provide adequate representation to all regions of the world.

Relationship Between Security Council and General Assembly

- On the issue of the relationship between the Security Council and the General Assembly, in India’s view, it should not be competitive or adversarial, but “**one of synergy and complementarity**” which benefits the UN objectives of the promotion of international peace and security.
- A relationship with the General Assembly based on transparency, mutual trust and frequent interaction with all Member States will increase the credibility of the Council that includes increase in dialogue between the Council and the Assembly.

- India thus has called for a **greater transparency and consistency** to improve the relationship between the two.

What is the issue?

- While the US, France, Britain and Russia are not averse to India joining the UNSC as a permanent member, **China has been opposed to it.**
- There is also reportedly no unanimity among the permanent veto-wielding five – US, UK, France, Russia and China – to share its veto powers with any new members for fears of diluting the influence and authority they currently wield.
- An informal "**coffee club**", comprising 40-odd member states (including Italy, Spain, Australia, Canada, South Korea, Argentina and Pakistan) has been instrumental in holding back reforms to the UNSC. Most members of the club are middle-sized states who oppose bigger regional powers grabbing permanent seats in the UN Security Council.

2) New Development Bank

About NDB

- The New Development Bank (NDB) was established by the **BRICS (Brazil, Russia, India, China and South Africa) countries.** It formally came into existence at the Ufa Summit (Russia) in **2015.**
- It was established with the objective of financing infrastructure and sustainable development projects in BRICS and other emerging economies and developing countries, complementing the efforts of multilateral and regional financial institutions toward global growth and development.

- In 2018, the NDB received **observer status** in the UN General Assembly.

Why in News?

- The New Development Bank has approved the **United Arab Emirates, Uruguay and Bangladesh** as its new members in its first expansion push.
- The NDB Board of Governors initiated the negotiation to **expand its membership in 2020.** It has now approved the United Arab Emirates, Uruguay and Bangladesh as its first new member countries.
- Since the beginning of its operations, NDB has approved about 80 projects totaling a portfolio of USD 30 billion. Projects in areas such as transport, water and sanitation, clean energy, digital infrastructure, social infrastructure and urban development are within the scope of the Bank.

3) UNITE Aware

About UN Peacekeeping Forces

- The United Nations Peacekeeping Forces are employed by the UN to maintain or re-establish peace in an area of armed conflict.
- The UN may engage in conflicts between states as well as in struggles within states. The UN acts as an impartial third party in order to prepare the ground for a settlement of the issues that have provoked armed conflict.
- The UN Peacekeeping Forces may **only be employed when both parties to a conflict accept their presence.**
- The Peacekeeping Forces are subordinate to the leadership of the United Nations. They are normally deployed as a consequence of a **UN Security Council** decision. However, on

occasion, the initiative has been taken by the **General Assembly**.

- Operational control belongs to the **Secretary-General and his secretariat**.

Two kinds

- There are two kinds of peacekeeping operations – **unarmed observer groups** and **lightly-armed military forces**. The latter are only allowed to employ their weapons for self-defence.
- The observer groups are concerned with gathering information for the UN about actual conditions prevailing in an area.
- The military forces are entrusted with more extended tasks, such as keeping the parties to a conflict apart and maintaining order in an area.
- The first UN peacekeeping mission was a team of observers deployed to the Middle East in 1948, during the **1948 Arab–Israeli War**.

Why in News?

- Presiding over a United Nations Security Council open debate on technology and peacekeeping, External Affairs Minister S. Jaishankar announced the rollout of a technological platform in partnership with the U.N., 'UNITE Aware', to help enhance the safety of U.N. peacekeepers.
- UNITE Aware is a **situational awareness software programme** that will utilise modern surveillance technology for real time threat assessments to peacekeepers and help them enhance their security.
- This will access live video and satellite imagery, and in very volatile circumstances can also deliver early warnings to peacekeepers. It can also record

data on critical incidents and events and follow daily operational activities. Using the platform, the entire peacekeeping operation can be visualised, coordinated, and monitored on a real time basis.

- India has developed the technology platform in partnership with the UN Department of Peacekeeping Operations and the Department of Operational Support.

Contribution of India

- India has consistently been **among the top troop contributing nations to the U.N.**
- In 2007, India became the first country to deploy an **all-women contingent** to a UN peacekeeping mission.
- The country has so far participated in 51 of the 71 missions and contributed over 2 lakh personnel.

4) BRICS Agriculture Research Platform

About BRICS

- BRICS brings together five major emerging economies- **China, Brazil, Russia, India and South Africa**. These 5 countries host 41% of the world population, contributing 24% of the world GDP and over 16% share in world trade.
- The grouping was formalised during the first meeting of **BRIC** (Brazil, Russia, India and China) Foreign Ministers on the margins of the UNGA in New York in September 2006.
- **South Africa** was added to the grouping in 2011 creating "BRICS".
- BRICS cooperation is aimed at complementing and strengthening existing bilateral and multilateral relations among member countries.
- The **Chairship of the forum is rotated annually** among the

members, in accordance with the acronym B-R-I-C-S.

- Cooperation among members is predicated on three levels or “tracks” of interaction, namely:
 - **Track I:** Formal diplomatic engagement between the national governments
 - **Track II:** Engagement through government-affiliated institutions, e.g. state-owned enterprises and business councils
 - **Track III:** Civil society and “people-to-people” engagement.

Significant developments of BRICS

New Development Bank

- Refer “New Development Bank” topic.

Contingency Reserve

- The BRICS Contingent Reserve Arrangement (CRA) is a framework for the provision of support

through liquidity and precautionary instruments in response to actual or potential short-term balance of payments pressures.

Agriculture Research Platform

- BRICS Agriculture Research Platform was recently set up in India to promote cooperation in the areas of agricultural research, extension, technology transfer, training and capacity building.
- The intention is to make the BRICS Agriculture Research Platform functional and encourage research cooperation to improve the use and application of agricultural technologies for meeting the needs of producers and processors.

Why in News?

- Union Minister for Agriculture & Farmers Welfare Narendra Singh Tomar chaired the 11th Meeting of BRICS Agriculture Ministers.

Polity

1) Insolvency and Bankruptcy Code (Amendment) Bill, 2021

About Insolvency and Bankruptcy Code, 2016

- Insolvency is a situation where individuals or companies are unable to repay their outstanding debt.
- The Code provides a time-bound process for resolving the insolvency of corporate debtors called the **corporate insolvency resolution process (CIRP)**.
- The **debtor himself or its creditors** may apply for initiation of CIRP in the event of a default of **at least one lakh rupees**. Under CIRP, a committee of creditors is constituted to decide on the insolvency resolution.
- The committee may consider a resolution plan which typically provides for the payoff of debt by merger, acquisition, or restructuring of the company. If a resolution plan is not approved by the **committee of creditors** within the specified time, the company is **liquidated** (the assets of the borrower will be sold to repay creditors).
- During CIRP, the affairs of the company are managed by the **Resolution Professional (RP)**, who is appointed to conduct CIRP.

Why in News?

- The Parliament has recently passed the Insolvency and Bankruptcy Code (Amendment) Bill, 2021. It amends the **Insolvency and Bankruptcy Code, 2016**.

Highlights of the Bill

Pre-packaged insolvency resolution

- The Bill introduces an **alternate insolvency resolution process for micro, small, and medium enterprises (MSMEs)**, called the pre-packaged insolvency resolution process (PIRP).

- Unlike CIRP, **PIRP may be initiated only by debtors**. The debtor should have a **base resolution plan** in place. During PIRP, the **management of the company will remain with the debtor**.

Minimum default amount

- Application for initiating PIRP may be filed in the event of a **default of at least one lakh rupees**. The central government may increase the threshold of minimum default **up to one crore rupees** through a notification.

Debtors eligible for PIRP

- PIRP may be initiated in the event of a default by a corporate debtor classified as an MSME under the **MSME Development Act, 2006**.
 - Currently, under the 2006 Act, an **enterprise with an annual turnover of up to Rs 250 crore, and investment in plant and machinery or equipment up to Rs 50 crore**, is classified as an MSME.
- For initiating PIRP, the corporate debtor himself **must apply to the National Company Law Tribunal (NCLT)**. The authority must approve or reject the application for PIRP **within 14 days** of its receipt.

Approval of financial creditors

- For applying for PIRP, the debtor must obtain **approval of at least 66% of its financial creditors** (in value of debt due to creditors) who are not related parties of the debtor.
 - *Financial creditor refers to lenders who have provided any sort of credit facility or a loan such as a bank or a financial institution.*
- Before seeking such approval, the debtor must provide creditors with a base resolution plan.

Proceedings under PIRP

- The debtor will submit the base resolution plan to the RP within two days of the commencement of the PIRP. A **committee of creditors** will be constituted within seven days of the PIRP commencement date, which will consider the base resolution plan.
- The committee may provide the debtor with an opportunity to revise the plan. The RP may also invite resolution plans from other persons.
- A resolution plan must be **approved by the committee (with at least 66% of the voting shares) within 90 days from the commencement date of PIRP**. The resolution plan approved by the committee will be examined by the NCLT. If no resolution plan is approved by the committee, the Resolution Professional may apply for the termination of PIRP.
- NCLT must either approve the plan or order termination of PIRP within 30 days of receipt. **Termination of PIRP will result in the liquidation of the corporate debtor.**

Moratorium

- During PIRP, the debtor will be provided with a moratorium under which certain actions against the debtor will be prohibited. These include filing or continuation of suits, execution of court orders, or recovery of property.

Management of debtor during PIRP

- During PIRP, the board of directors or partners of the debtor will continue to manage the affairs of the debtor. However, the management of the debtor may be vested with the Resolution Professional if there has been fraudulent conduct or gross mismanagement.

Initiation of CIRP

- At any time from the PIRP commencement date but before the approval of the resolution plan, the committee of creditors may decide (with at least 66% of the voting

shares) to terminate PIRP and instead initiate CIRP.

Significance

- Besides offering a way for MSMEs to restructure their debts, the pre-pack scheme is expected to reduce the burden on benches of the National Company Law Tribunals by offering a faster resolution mechanism than ordinary CIRPs.

2) Taxation Laws (Amendment) Bill

Background

- The Parliament has recently passed the Taxation Laws (Amendment) Bill to **nullify the tax clause provision that allows the government to levy taxes retrospectively**.
- The government has been fighting legal cases against Vodafone and Cairn Energy on taxes it has claimed retrospectively on transactions these entities entered into relating to operations in the country. Both the U.K.-based companies have won international arbitration rulings that held the Indian government in breach of bilateral investment protection agreements.

What is the genesis of the retrospective tax imbroglio?

- In the **Union Budget of 2012**, the then Finance Minister, Pranab Mukherjee, introduced an **amendment to the Income Tax Act, 1961**, which **allowed the government to retrospectively tax such transactions**.
 - *In terms of taxation, retrospective tax taxes a transaction that took place prior to the law being framed.*
- The amendment was passed by the Parliament, allowing the government to ask companies to pay taxes on mergers and acquisitions (M&As) that happened before that date.
- The issue goes back to 2007 when UK-based telecom giant **Vodafone** bought

a 67% stake in Hong Kong-based Hutchison Whampoa for \$11 billion to which the Indian government raised a demand of Rs 7,990 crore in capital gains saying the company should have deducted the tax at source before making a payment to Hutchison. **The company took the matter to the Supreme Court which eventually turned in favour of Vodafone.**

- One such indirect transfer was also made against the 2006 internal corporate restructuring carried out by **UK-based Cairn Energy.**
- **The changes to the Finance Act allowed India to reimpose its tax demand on Vodafone and Cairn Energy.**

Arbitration Ruling

- This prompted Cairn UK to move the **Permanent Court of Arbitration at The Hague, Netherlands**, saying that India had violated the terms of the India-UK Bilateral Investment Treaty by imposing a retrospective tax due on it. The treaty provides protection against arbitrary decisions by laying down that India would treat investment from the UK in a "fair and equitable" manner. Vodafone also filed a case against India's move.
- Last year, the Hague court **ruled in favour of Cairn UK and Vodafone**, quashing India's tax claim after holding that it violated the "equitable and fair treatment standard" under bilateral investment treaties.

What are the proposed changes?

- The new Bill **proposes to do away with retrospective taxation on the sale of assets in India by foreign entities executed before May 2012**, with a caveat — the **companies** that will benefit from the amendment **must withdraw all legal cases against the government and forfeit interest, costs and any damages.**

- The government, on its part, is willing to refund any tax dues it may have collected or seized.

How are global investors likely to react?

- The Bill is aimed at encouraging more international investments into India and is touted as a welcome relief for companies who have long invested in the country.

Related Information

About PCA

- The Permanent Court of Arbitration was established by the **Convention for the Pacific Settlement of International Disputes**, concluded at The Hague in 1899 during the first Hague Peace Conference.
- The 1899 Convention was revised at the second Hague Peace Conference in 1907.
- The PCA is not a court in the traditional sense but provides services of an **arbitral tribunal** to resolve disputes that arise out of international agreements between member states, international organizations or private parties.
- The cases span a range of legal issues involving territorial and maritime boundaries, sovereignty, human rights, international investment, and international and regional trade.
- The PCA has **no sitting judges: the parties themselves select the arbitrators.**
- The PCA is an official United Nations Observer. It is headquartered in The Hague, Netherlands.

Members

- The PCA has more than 120 Contracting Parties which have acceded to one or both of the PCA's founding conventions (1899 and 1907 Conventions).
- **India is a party** to the PCA according to the convention of 1899.

3) Essential Defence Services Bill, 2021

What's in the news?

- The Parliament has passed the Essential Defence Services Bill, 2021.

Highlights of the Bill

- The Essential Defence Services Bill, 2021 **allows the Central Government to prohibit strikes, lock-outs, and lay-offs in units engaged in essential defence services.**
- **The essential defence services include:**
 - ✓ Any establishment or undertaking **dealing with the production of goods or equipment required for defence-related purposes;**
 - ✓ **Any establishment of the armed forces or connected with them or defence.** These also include services that, if ceased, would affect the safety of the establishment engaged in such services or its employees;
 - ✓ In addition, the **government may declare any service** as an essential defence service if its cessation would affect the: (i) production of defence equipment or goods, (ii) operation or maintenance of industrial establishments or units engaged in such production, or (iii) repair or maintenance of products connected with defence.
- The government may issue such order if necessary in the interest of:
 1. Sovereignty and integrity of India
 2. Security of any state
 3. Public
 4. Public order
 5. Decency
 6. Morality
- The prohibition order will **remain in force for six months and may be extended by another six months.**
- Strikes and lock-outs that are declared after the issue of the prohibition order or those that had commenced before

the prohibition order was issued **will be illegal.**

- The prohibition **will not apply to lay-offs made due to power shortage or natural calamity, or lay-offs of temporary or casual workmen.**
- Under the Bill, a **strike is defined as cessation of work by a body of persons acting together.** It includes the following under its purview:
 - Mass casual leave
 - Coordinated refusal of any number of persons to continue to work or accept employment
 - Refusal to work overtime, where such work is necessary for the maintenance of essential defence services
 - Any other conduct which results in, or is likely to result in, disruption of work in essential defence services.
- All offences punishable under the Bill will be **cognisable and non-bailable.**
- The new Bill also **amends the Industrial Disputes Act, 1947 to include essential defence services under public utility services.** Under the Industrial Disputes Act, in the case of public utility services, a **six-week notice must be given before:**
 - Persons employed in such services go on **strike** in breach of contract;
 - Employers carrying on such services do **lock-outs** (lockout means temporary closing of employment or the suspension of work, or the refusal by an employer to continue to employ any number of persons employed by him).

Who will the Essential Defence Services Bill, 2021 affect?

- The Bill has a direct bearing on around 70,000 employees of the 41 ordnance factories around the country, who are unhappy with the **corporatisation of Ordnance Factory Board**, fearing that it will impact their service and retirement conditions.

- In June 2021, the government announced the corporatisation of the Ordnance Factory Board which was otherwise directly under the **Department of Defence Production** and worked as an arm of the government.
- As per the new plan, 41 ordnance factories that make ammunition and other equipment for the armed forces will become part of **seven government-owned corporate entities**. The government has claimed that the move is aimed at improving the efficiency and accountability of these factories but the employees in these factories are unhappy with the development and have threatened indefinite strikes.

4) AERA Bill, 2021

What's in the news?

- In the latest monsoon session, Parliament passed the Airports Economic Regulatory Authority of India (Amendment) Bill, 2021.
- The Bill seeks to **broaden the category of airports for which the Airports Economic Regulatory Authority (AERA) of India can determine tariff** by amending the definition of major airports.

Why has the definition of a major airport been amended?

- The AERA regulates tariffs and other charges for aeronautical services rendered at **'major' airports**.
- Under the AERA Act, 2008, a **major airport** is one which "has, or is designated to have, **annual passenger throughput in excess of three-and-a-half million or any other airport as the Central Government may, by notification, specify**".
- However, it **does not provide for determination of tariff for a group of airports**.
- The Amendment Bill has amended the definition of a major airport to include

"a group of airports" after the words "any other airport". The government hopes the move will **encourage development of smaller airports and make bidding for airports with less passenger traffic attractive**.

- It plans to **club profitable airports with non-profitable ones and offer them as a package** for development in public-private partnership mode to expand connectivity.

Was there a need to amend the AERA Act?

- The Airports Authority of India (AAI) awarded six airports — Lucknow, Ahmedabad, Jaipur, Mangaluru, Thiruvananthapuram and Guwahati — for operations, management and development in public private partnership mode in 2019.
- Later that year, the AAI Board approved leasing of another six airports — Bhubaneswar, Varanasi, Amritsar, Raipur, Indore and Tiruchi — for undertaking operations, management and development in public private partnership mode.
- The Ministry of Civil Aviation plans to **club each of these airports with nearby smaller airports for joint development**. The move follows Finance Minister Nirmala Sitharaman's Budget Speech this year, in which she said the **government planned to monetise airports in tier-2 and tier-3 cities**.

How did AERA come into existence? What tariffs does it determine?

- AERA is a **statutory body** constituted under the AERA Act, 2008. It was constituted as an **independent economic regulator** for **determining the tariff for aeronautical services rendered at major airports**.
- According to the AERA website, there are 25 major airports. For the remaining non-major airports owned by AAI, the **Ministry of Civil Aviation**

approves the charges for aeronautical services.

What are the apprehensions?

- Though this Bill proposes to make changes which appear to be lucrative for the aviation sector, however, there is a **lack of clarity regarding what will be the criterion for deciding which airports get clubbed together.**
- This clarity needs to be brought in to achieve the objective of the Bill and the government will also have to ensure that a **monopoly situation is not created** in the airport operating business while awarding a group of airports to the same entity.
- Whether the government succeeds in balancing the interests of the private sector and the government's objective of privatising smaller airports will also depend on how the airports are packaged and if there are enough growth prospects, economic activity or tourist attractions near the non-profitable airports that will be clubbed.

5) Constitution (One Hundred and Twenty-Seventh Amendment) Act, 2021

Context

- The **105th Constitution Amendment** was notified recently after it received the assent of President Ramnath Kovind. It is aimed at **restoring to the States their power to identify socially and educationally backward classes.**
- The Amendment became necessary to undo the effect of a **Supreme Court verdict** that States had lost their power to include or exclude communities in the 'Backward Classes' list **after Parliament enacted the 102nd Constitution Amendment.**

Why was the Amendment required?

- Through the 102nd Constitution Amendment, Parliament created a **National Backward Classes**

Commission, vesting it with the power to be consulted by the Centre as well as the States in **all matters concerning the 'socially and educationally backward classes' (SEBCs).**

- In a bid to provide the Commission with the same powers as the Scheduled Castes and Scheduled Tribes Commission, Parliament used **wording identical to the existing provisions relating to the SC/ST Commission.**
- Thus, under **Article 342A**, it was laid down that the **President shall notify a list of SEBCs** in relation to each State and Union Territory in **consultation with the Governors.** This was called the '**Central List**', and once it is notified, **only Parliament alone could make changes** to it.
- Based on this, the Supreme Court, while considering a challenge to the Maratha reservation in Maharashtra on various grounds, concluded that after this Amendment came into force, **States can no more notify or identify backward classes, and only the President could do so, and further changes could be made by Parliament.**

What was the reaction of political parties?

- The Union government had argued in court that **neither the Centre nor Parliament intended to take away the State's power to identify SEBCs.** The use of the term, 'Central List', meant that what the President notified was a list of backward classes for the **purpose of the Central government and its instrumentalities, and did not affect the lists maintained by the various States.**
- As there was a political consensus that the Supreme Court's interpretation required to be undone by law, it was decided to amend the Constitution once again to clarify the State's role in identifying SEBCs.

- It was introduced as the Constitution (127th Amendment) Bill, 2021. After its passage and on receiving presidential assent, it was notified as the **Constitution (105th Amendment) Act, 2021.**

What does the 105th Amendment do?

- Parliament adopted fresh legislation to undo the effects of the Supreme Court's interpretation. Therefore, it contains specific clauses that seek to **restore the original intention of having a 'Central List' for the purposes of the Union and letting States retain their respective lists.**
- It first adds a proviso to the effect that the requirement that the **National Backward Classes Commission should be consulted on policy matters will not apply to the State lists of SEBCs.**
- It specifies that the **list of SEBCs notified by the President shall be only for the purposes of the Central government alone**, and that the 'Central List' means only the list "prepared and maintained by and for the Central Government".
- Further, the 105th Amendment clarifies that **every State or Union Territory may, by law, prepare and maintain for its own purposes a list of SEBCs and this may be different from the Central List.**
- Finally, to end all debate on how SEBCs are defined, the latest Amendment also **changed the definition** given in the 102nd Amendment. Originally, "**socially and educationally backward classes**" were described as "such backward classes as are so deemed under **Article 342A** for the purposes of this Constitution", that is, those found in the List notified by the President under Article 342A.
- This has now been changed to the effect that SEBCs are those **so deemed under the same Article for the**

purposes of the Central government, or the State or the Union Territory.

6) Controller General of Accounts **Who is Controller General of Accounts (CGA)?**

- A CGA is the **Principal Advisor on Accounting matters to the Union Government.**
- He is responsible for establishing and managing a **technically sound Management Accounting System.**
- He is responsible for **preparation and submission of the accounts of the Union Government** and also responsible for **exchequer control and internal audits.**
- CGA derives his mandate from **Article 150** of the Constitution.
- The office of CGA functions under the **Department of Expenditure, Ministry of Finance.**

Duties and responsibilities of CGA

- General principles of Government accounting relating to **Union or State Governments** and form of accounts, and framing or revision of rules and manuals relating thereto;
- Reconciliation of cash balance of Union Government with Reserve Bank in general and, in particular, of Reserve Deposits pertaining to Civil Ministries or Departments;
- Overseeing the maintenance of adequate standards of accounting by **Central Civil Accounts Offices;**
- Consolidation of monthly accounts, preparation of review of trends of revenue realization and significant features of expenditure etc and preparation of annual accounts (including Summary, Civil Appropriation Accounts) showing under the respective heads, the annual receipts and disbursements for the purpose of the Union Government;
- **Administration** of Central Treasury Rules and Central Government Account (Receipt and Payment Rules 1983);

- **Coordination and assistance** in the introduction of management accounting system in Civil Ministries or Departments;
- **Cadre management** of Group 'A' (Indian Civil Accounts Service) and Group 'B' Officers of the Central Civil Accounts Offices;
- **Matters relating to the Central Civil Accounts staff** belonging to Group 'C' and 'D';
- **Disbursement of Pension** through Public Sector Banks (PSBs) in respect of Central Civil Pensioners, Freedom Fighters, High Court Judges, Ex-M.P.s and Ex-Presidents.

Why in News?

- The Government has appointed Mr. Deepak Das as the new Controller General of Accounts.

7) NALSA

About NALSA

- The National Legal Services Authority (NALSA) is a **statutory body** constituted under the **Legal Services Authorities Act, 1987** to provide **free Legal Services** to the weaker sections of the society and to organize **Lok Adalats** for amicable settlement of disputes.
 - *Lok Adalat (people's courts) is a body established by the government to settle disputes through conciliation and compromise.*
- NALSA came into force in 1995. It was enacted by the Parliament to give effect to **Article 39 A of the Constitution of India** which guarantees free and competent legal services to the weaker sections of the society to ensure that they are not denied access to justice by reason of economic or other disability.
- The NALSA is headed by the **Chief Justice of India as its Patron-in-Chief**, the **second senior most judge**

of the Supreme Court is the Executive Chairman.

Regional Bodies

- In every State, the **State Legal Services Authority** has been constituted to give effect to the policies and directions of the NALSA and to give free legal services to the people and conduct Lok Adalats in the State.
- The State Legal Services Authority is headed by the **Chief Justice of the respective High Court** who is the Patron-in-Chief of the State Legal Services Authority.
- In every District, the **District Legal Services Authority** has been constituted to implement Legal Services Programmes in the District. The District Legal Services Authority is situated in the District Courts Complex in every District and chaired by the **District Judge of the respective district.**

What are Legal Services?

- Legal Services includes providing **Free Legal Aid** to those **weaker sections of the society** who fall within the purview of **Section 12** of the Legal Services Authority Act, 1987.
- It also entails **creating legal awareness** by spreading legal literacy through legal awareness camps, print media, digital media and organizing **Lok Adalats** for the amicable settlement of disputes which are either pending or which are yet to be filed, by way of compromise.
- Legal services also encompasses **facilitating the beneficiaries to get their entitlements** under various government schemes, policies and legislations.
- Legal Aid is provided to the needy from the **lowest Court to the Supreme Court of India.** Legal Aid Counsel represent such needy persons before the lower Courts, High Courts and also before the Supreme Court of India.

Who are entitled to Free Legal Services?

- The sections of the society as enlisted under Section 12 of the Legal Services Authorities Act are entitled for free legal services, they are :
 1. A member of a Scheduled Caste or Scheduled Tribe;
 2. A victim of trafficking in human beings or begar as referred to in Article 23 of the Constitution;
 3. A woman or a child;
 4. A mentally ill or otherwise disabled person;
 5. A person under circumstances of undeserved want such as being a victim of a mass disaster, ethnic violence, caste atrocity, flood, drought, earthquake or industrial disaster; or
 6. An industrial workman; or
 7. a person in receipt of annual income less than the amount prescribed by the State Government, if the case is before a Court other than the Supreme Court, and less than Rs 5 Lakh, if the case is before the Supreme Court.
 8. Senior citizens' eligibility for free legal aid depends on the Rules framed by the respective State Governments in this regard.

Why in News?

- Supreme Court judge Justice U.U. Lalit said every police station in the country must have display boards informing about the right to legal aid and the availability of free legal aid services.
- Justice Lalit is the Executive Chairman, NALSA.

8) Pardoning powers

Articles 72 and 161

- Articles 72 and 161 of the Constitution empower the President of India and the governors of states to grant pardon or suspend, remit or commute sentences in certain cases.

- **Pardon:** It removes both the sentence and the conviction and completely absolves the convict from all sentences, punishments and disqualifications.
- **Commutation:** It denotes the substitution of one form of punishment for a lighter form. For example, a death sentence may be commuted to rigorous imprisonment, which in turn may be commuted to a simple imprisonment.
- **Remission:** It implies reducing the period of sentence without changing its character. For example, a sentence of rigorous imprisonment for two years may be remitted to rigorous imprisonment for one year.
- **Respite:** It denotes awarding a lesser sentence in place of one originally awarded due to some special fact, such as the physical disability of a convict or the pregnancy of a woman offender.
- **Reprieve:** It implies a stay of the execution of a sentence (especially that of death) for a temporary period. Its purpose is to enable the convict to have time to seek pardon or commutation from the President.

- Under Article 72, the President has the power to “grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence”.
- He can do so in all cases where the punishment or sentence is handed down by a **court martial**, in cases where the punishment or a sentence is for an offence under **any law relating to a matter to which the executive power of the Union extends, and in all cases where a death sentence is awarded.**

- Article 161 grants the governor the power to “grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence”. The governor can do so for any person convicted of any offence against **any law relating to a matter to which the executive power of the State extends**.
- The scope of the **pardoning power of the President under Article 72 is wider** than the pardoning power of the Governor under Article 161. The power differs in the following two ways:
 - The power of the President to grant pardon extends in cases where the punishment or sentence is by a **Court Martial** but Article 161 does not provide any such power to the Governor.
 - The President can grant pardon in all cases where the sentence given is the **sentence of death** but pardoning power of the Governor does not extend to death sentence cases.

Why in News?

- The Supreme Court has held that the Governor of a State can pardon prisoners even before they have served a minimum 14 years of prison sentence.
- The court held that the Governor’s power to pardon overrides a provision in the Code of Criminal Procedure — **Section 433A** —which mandates that a prisoner’s sentence can be remitted only after 14 years of jail.
- The court also clarified that the Governor could exercise his remission powers under Article 161 **only on the aid and advice of the council of ministers headed by the chief minister**.
- The court was considering the feasibility of remission policies in Haryana.

9) Juvenile Justice Amendment Bill 2021

Juvenile Justice (Care and Protection of Children) Act, 2015

- In India, a juvenile is a **person less than 18 years of age**.
- The Juvenile Justice (Care and Protection of Children) Act, 2015 **addresses children in conflict with law and children in need of care and protection**.
- One of the main provisions of the Act is that juveniles in the **age group of 16-18 years who commit a heinous offence may be tried as an adult**.
- The nature of the crime, and whether the juvenile should be tried as a minor or a child, was to be determined by a **Juvenile Justice Board**.
- The second major provision is with regards to **adoption**, bringing a **more universally acceptable adoption law** instead of the Hindu Adoptions and Maintenance Act (1956) and Guardians of the Ward Act (1890) which was for Muslims.
- The Act **streamlined adoption procedures** for orphans, abandoned and surrendered children and the existing **Central Adoption Resource Authority (CARA)** has been given the **status of a statutory body** to enable it to perform its function more effectively.
- The Act **fulfils India's commitment as a signatory to the United Nations Convention on the rights of the child, the Hague Convention on Protection of Children and Co-operation in respect of Inter-country Adoption (1993)**, and other related international instruments.
- As a signatory, India is required to undertake all appropriate measures to ensure the rights of children with regard to juvenile justice, care and protection, and adoption.

Why in News?

- The Parliament has recently passed The Juvenile Justice (Care and Protection of Children) Amendment Bill, 2021 which seeks to amend the Juvenile Justice (Care and Protection of Children) Act, 2015.

Highlights of the Bill

Adoption:

- Under the 2015 Act, once prospective adoptive parents accept a child, an adoption agency files an application in a **civil court** to obtain the adoption order. The adoption order issued by the court establishes that the child belongs to the adoptive parents.
- The amendment Bill provides that instead of the court, the **district magistrate (including additional district magistrate)** will perform these duties and issue all such orders. This provision has been included to expedite adoption proceedings.

Appeals:

- The amendment Bill provides that any person aggrieved by an adoption order passed by the district magistrate may file an **appeal before the Divisional Commissioner**, within 30 days of such order. Such appeals should be disposed of within four weeks from the date of filing of the appeal.
- The 2015 Act provides that there will be **no appeal for any order made by a Child Welfare Committee** concluding that a person is not a child in need of care and protection. The **Bill removes this provision.**

Serious offences:

- The 2015 Act provides that the **Juvenile Justice Board** will inquire about a child who is **accused of a serious offence**. Serious offences are those for which the punishment is **imprisonment between three to seven years**.
- The Bill adds that **serious offences will also include offences for which maximum punishment is**

imprisonment of more than seven years, and minimum punishment is not prescribed or is less than seven years.

Designated Court:

- The 2015 Act provides that offences against children that are punishable with **imprisonment of more than seven years**, will be tried in the **Children's Court** (equivalent to a Sessions Court). **Other offences** (punishable with imprisonment of less than seven years) will be tried by a **Judicial Magistrate**.
- The Bill amends this to provide that **all offences under the Act will be tried in the Children's Court.**

Offences against children:

- The 2015 Act provides that an offence under the Act, which is **punishable with imprisonment between three to seven years, will be cognizable** (where arrest is allowed without warrant) and **non-bailable**.
- The amendment Bill provides that **such offences will be non-cognizable and non-bailable.**

Child Welfare Committees (CWCs):

- The 2015 Act provides that states must constitute **one or more CWCs for each district for dealing with children in need of care and protection**. It provides certain criteria for the appointment of members to CWC. For instance, a member should be: (i) involved in health, education, or welfare of children for at least seven years, or (ii) a practising professional with a degree in child psychology, psychiatry, law, or social work.
- The amendment Bill adds **certain criteria for a person to be ineligible to be a member of the CWC**. These include: (i) having any record of violation of human rights or child rights, or (ii) being a part of the management of a child care institution in a district.

10) Parties get 48 hours to publish candidates' criminal records

What's in the news?

- In a step towards decriminalising politics, the Supreme Court held eight political parties **guilty of contempt of court** for not making public criminal records of their poll candidates.
- The court **directed that political parties must publish the criminal antecedents of candidates within 48 hours of their selection.**
- In its **February 2020 judgment**, linked to the Bihar Assembly election, the Supreme Court said candidates must upload these details either within 48 hours of their selection or at least two weeks before the first date for filing of nomination papers.
- The Supreme Court made it **mandatory for all political parties to put up the details on their websites and also publish them in two newspapers.** The compliance report will have to be submitted to the Election Commission of India within 72 hours of the selection of the candidate.
- While delivering its judgment, the Supreme Court noted over the last four general elections, there has been an **alarming increase of criminals in politics.** In 2004, 24% of the Members of Parliament had criminal cases pending against them; in 2009, that went up to 30%; in 2014 to 34%; and in 2019, as many as 43% of MPs had criminal cases pending against them.

Related Information

What is Contempt of Court?

- Contempt of court is an act of disrespect or disobedience towards

a judge or court's officers or interference with its orderly process.

- According to the **Contempt of Courts Act, 1971**, contempt of court can **either be civil contempt or criminal contempt.**

Civil contempt

- It means **wilful disobedience** to any judgment, decree, direction, order, writ or other process of a court or wilful breach of an undertaking given to a court.

Criminal contempt

- It means the publication (whether by words, spoken or written, or by signs, or by visible representations, or otherwise) of any matter or the doing of any other act whatsoever which
 - **scandalises or tends to scandalise**, or lowers or tends to lower the authority of, any court; or
 - **prejudices, or interferes or tends to interfere** with, the due course of any judicial proceeding; or
 - **interferes or tends to interfere with, or obstructs or tends to obstruct**, the administration of justice in any other manner.

Punishments for Contempt of Court

- The punishment for contempt of court is simple imprisonment for a term up to six months and/or a fine of up to ₹ 2,000.
- The Supreme Court in 1991, ruled that it has the **power to punish for contempt not only of itself but also of high courts, subordinate courts and tribunals functioning in the entire country.**
- The **High Courts** have been given special powers to punish contempt of subordinate courts, as per

Section 10 of The Contempt of Courts Act of 1971.

What is not contempt of court?

- **Fair and accurate reporting of judicial proceedings** will not amount to contempt of court. Nor is any **fair criticism on the merits of a judicial order** after a case is heard and disposed of.
- In 2006, the government brought in an amendment to the Contempt of Courts Act of 1971 which now provides **“truth” as defence**

provided it is bona fide and in public interest.

Constitutional Provisions

- **Article 129:** Grants **Supreme Court** the power to punish for contempt of itself.
- **Article 142(2):** Enables the Supreme Court to investigate and punish any person for its contempt.
- **Article 215:** Grants every **High Court** the power to punish for contempt of itself.

Economy

1) G-SAP 2.0

What's in the news?

- The Reserve Bank of India has said it will conduct an open market purchase of government securities worth ₹25,000 crore under the G-sec Acquisition Programme (G-SAP 2.0).
- The RBI had conducted an open market purchase of government securities of Rs 1 lakh crore under the G-SAP 1.0 in the first quarter of the financial year 2021-22.

What is G-SAP?

- Under G-SAP, RBI commits to a **specific amount of open market purchases of government securities** with a view to **enabling a stable and orderly evolution of the yield curve**.
- G-SAP is running alongside RBI's regular operations including **Liquidity Adjustment Facility (LAF), open market operations (OMOs) and Operation Twist**.

What are Government Securities (G-Secs)?

- G-Sec is a tradable instrument issued by the **Central Government or the State Governments**. It acknowledges the Government's debt obligation.
- Such securities are **short term** (usually called **treasury bills**, with original maturities of **less than one year**) or **long term** (usually called **Government bonds or dated securities** with original maturity of **one year or more**).
- In India, the **Central Government issues both**, treasury bills and bonds or dated securities while the **State Governments issue only bonds or dated securities**, which are called the **State Development Loans (SDLs)**.
- G-Secs carry practically no risk of default and, hence, are called **risk-free gilt-edged instruments**.

2) Govt. cautions savers against Nidhi firms

About Nidhi companies

- Nidhi companies carry on the business of **accepting deposits and lending the same on demand amongst its members**. Their main objective is **cultivating the habit of thrift and saving amongst its members**.
- It is a **type of Non-Banking Financial Company (NBFC)** registered under the **Companies Act 2013**.
- One of the key features of a Nidhi company is the **limitation of its services to its members only**. This reduces the risk of non-payment of loans as the Company accepts deposits and offers loans to its members only.
- These companies are **not entitled to carry on** the business of Hire Purchase Financing, Insurance, Chit Funds and Acquisition of securities or Issue of any Debt Instruments.
- Nidhi Companies are regulated by the **Ministry of Corporate Affairs**.
- Since Nidhi's come under one class of NBFCs, **RBI is empowered to issue directions** to them in matters relating to their deposit acceptance activities. However, in recognition of the fact that these Nidhi's deal with their shareholder-members only, RBI has **exempted the notified Nidhi's from the core provisions of the RBI Act and other directions applicable to NBFCs**.

Why in News?

- The Ministry of Corporate Affairs has warned people against parking savings in Nidhi companies, after it found that a large number of entities operating as Nidhi companies had not applied to be recognised under **section 406 of the Companies Act, 2013** and the **amended Nidhi Rules of 2014** and were thus in violation of the law.

- The ministry urged people to verify the background of such entities before investing in them.

3) National Monetisation pipeline

What's in the news?

- Recently, Finance Minister Nirmala Sitharaman unveiled a four-year National Monetisation Pipeline (NMP) worth an estimated **Rs 6 lakh crore**. It **aims to unlock value in brownfield projects** (which are assets that are **already operational**) by engaging the private sector, transferring to them revenue rights in the projects, and **using the funds generated for infrastructure creation across the country**.
- Following through on the **Budget's plan to monetise public assets to fund fresh capital expenditure on infrastructure**, the government released a list of projects and facilities to be offered to private investors over the next four years through structured leasing and securitisation transactions.

What is the National Monetisation Pipeline?

- The NMP names a **list of public assets that will be leased to private investors**. **Only brown-field assets** are planned to be leased out under the NMP. So, to give an example, an airport that is already operational may be leased out to an investor.
- Importantly, there **won't be any transfer of ownership** from the government to the private sector when assets are leased out.
- The government only plans to **cede control over its assets for a certain period of time**, after which the assets must be returned to the government unless the lease is extended.

Will NMP help the economy?

- The government believes that leasing out public assets to private investors will help **free capital that is stuck in these assets**. For example, say the

government has invested thousands of crores in a road project. It may take the government decades to recover its investment through the annual toll revenues. Instead, the government can recover a good chunk of its investment by leasing out the right to collect toll for the next 30 years to a private investor.

- The government can use this money, in turn, to **build fresh infrastructure under the National Infrastructure Pipeline (NIP)**. In fact, the proceeds from the NMP are expected to account for **about 14% of the total outlay for infrastructure under the NIP**.
- The government believes all this spending will **boost economic activity**. Analysts also believe that the government has now through the NMP found the right model for infrastructure development.
- The government is best suited to **tackle the ground-level challenges in building infrastructure**, while the private sector can **operate and offer indirect finance to these projects** through the NMP.

What are the risks?

- The allocation of assets owned by governments to private investors is often **subject to political influence**, which can lead to **corruption**. In fact, many in the Opposition allege that the NMP will favour a few business corporations that are close to the government.
- The expected boost to economic activity due to higher government spending may also need to be **weighed against the opportunity costs**.
 - *Opportunity cost is the loss of other alternatives when one alternative is chosen.*
- For one, the money that the government collects by leasing out assets comes from the pockets of the private sector. So **higher government**

spending will come at the cost of lower private spending.

- The NMP also **does not address the various structural problems** such as legal uncertainties that hold back private investment in infrastructure.
- However, it is worth noting that economists generally believe that **scarce assets are better managed and allocated by the private sector than by the government**. So to the extent that the NMP frees assets from government control, it can help the economy.
- There are also concerns that the leasing of airports, railways, roads and other public utilities to private investors **could lead to higher prices for consumers**. If the government merely cedes control of public utilities to private companies without taking steps to foster greater competition, it can indeed lead to **poor outcomes for consumers**.

What lies ahead?

- The success of the NMP will depend on the **demand for brown-field government assets among private investors**. The government's past disinvestment projects such as the sale of Air India did not catch the fancy of investors owing to the stringent conditions set by the government.
- The **pricing of assets and the terms of sale** will thus determine the level of interest that private investors show for assets leased under the NMP.
- In the past, doubts have been raised about the allocation of airports and other assets to certain private business groups. So the **process that the government adopts** this time to allocate assets may come under scrutiny. There is likely to be the **demand for an open, competitive auction of assets**.

- Launched in 2016, the Government e-Marketplace (GeM) is a **100 percent government-owned company** setup under the aegis of the **Ministry of Commerce and Industry**. Its aim is to **facilitate public procurement through a centralized web portal**.
- It is a completely paperless, cashless and system driven e-market place that enables **procurement of common use goods and services** with minimal human interface. GeM aims to enhance transparency, efficiency and speed in public procurement.
- GeM was developed with the technical support of the **National eGovernance Division** under the Ministry of Electronics and Information Technology.
- Being an open platform, GeM offers no entry barriers to bonafide suppliers who wish to do business with the Government.
- In 2017, the government made it **mandatory** for all the departments and ministries to source goods and services from the GeM.

Why in News?

- The Government has said that the GeM system has resulted in a **10% savings in public procurement costs in five years**. The GeM has resulted in a savings of ₹10,000 crore in the cumulative procurements of ₹1 lakh crore facilitated through the portal in five years, and improved the speed of procurement.
- However, the system has still tapped only 5% of India's total government purchases of about ₹20 lakh crore a year.
- **56% of the order value** processed through the portal has been delivered by **micro, small and medium enterprises (MSMEs)**, with seven lakh small firms on board.

4) Government e-Marketplace About GeM

5) Centre to free up untapped space in SEZs

About SEZs

- Special Economic Zone (SEZ) is a geographic area in which the **business and trade laws are different from the rest of the country.**
- The objective of developing SEZs include increasing the balance of trade and attracting newer inward-investments into the country, and creating newer jobs.
- **Financial incentives** are granted to those setting up SEZs and cover a wider gamut of benefits for investors across taxation, customs, labour regulations, etc.
- The **Special Economic Zones Act, 2005**, provides the umbrella legal framework, covering all important legal and regulatory aspects of SEZ development in the country.
- It should be noted that all Goods and services supplied by SEZ units to **Domestic Tariff Area** (whole of India but does not include the areas of the SEZ) are **treated as imports** into India and subject to all procedures and rules applicable in case of normal imports into India.
- Presently, 378 SEZs are notified, out of which 265 are operational.

Salient Features

- The salient features of the SEZ scheme are:-
 - A **designated duty free enclave to be treated as a territory outside the customs territory of India** for the purpose of authorised operations in the SEZ;
 - No licence required for import;
 - Manufacturing or service activities allowed;
 - The Unit shall achieve **Positive Net Foreign Exchange** to be calculated cumulatively for a **period of five years** from the commencement of production;
 - Domestic sales subject to full customs duty and import policy in force;

- SEZ units will have freedom for subcontracting;
- No routine examination by customs authorities of export/import cargo;
- SEZ Developers /Co-Developers and Units enjoy tax benefits as prescribed in the SEZs Act, 2005.

Objectives

- The notification of SEZs in the country is guided by the following:-
 1. Generation of additional economic activity;
 2. Promotion of exports of goods and services;
 3. Promotion of investment from domestic and foreign sources;
 4. Creation of employment opportunities;
 5. Development of infrastructure facilities.

Why in News?

- The government is set to free up unused built-up area worth about ₹30,000 crore and idle land inside Special Economic Zones for other economic activity.
- The move to free up unutilised land parcels is likely to be operationalised by the end of August, as part of a simpler regulatory regime that the government is planning for SEZs, which **account for about 30% of India's exports.**

6) Commercial coal mining

Background

- In 2020, as a part of the announcements made under the **Atmanirbhar Bharat**, the Central government allowed commercial mining in the coal sector.

What is commercial mining?

- Commercial mining **allows the private sector** to mine coal commercially on a **revenue-sharing model without placing any end-use restrictions.**

- Removing end-use restrictions marks the **end of the captive mining regime**.
 - *Captive mining is the coal mined for a specific end-use by the mine owner, but not for open sale in the market.*
 - *A revenue sharing mechanism instead of the earlier fixed price per tonne will introduce competition, transparency and private sector participation in the market.*
- The private firms will have the option of either gasification of the coal or exporting it. They can also use it in their own end-use plants or **sell them in the markets**.
- Further, with **100 per cent foreign direct investment** allowed in the coal sector, global companies can also participate in the auctions.
- The complete freedom to decide on sale, pricing, and captive utilisation is expected to attract many private sector firms to participate in the auction process.
- The government expects these steps will generate employment and reduce India's import bill.

Was the private sector never allowed in mining?

- Private sector participation was permitted until the early 1970s. The Indira Gandhi government announced the **nationalisation of the coal blocks** in two phases **between 1971 and 1973**.
- The reforms announced in 2020 will effectively **end state-owned**

Coal India Ltd (CIL)'s monopoly over mining and selling of coal.

Was this the first attempt by govt to open up the sector?

- After the Supreme Court cancelled the coal block allocations made to the private sector in 2014, the central government had brought in the Coal Mines (Special provisions) Act of 2015 to return these coal blocks to the private sector through **auctions**.
- But there had been **end-use restrictions** and the private sector was **not allowed to trade into the market** making it unattractive for the private sector.
- Further in 2018, private sector firms were allowed to **sell upto 25 per cent of the output** in the market, but this also saw a lukewarm response from the private sector.

Significance

- Despite India having the **world's fourth largest coal reserve** and being the **second largest producer**, the country was the **second largest coal importer**. The sector had been kept out of competition and devoid of transparency, hampering investment and efficiency.
- Fully opening up the sector would increase competition, capital, participation and technology. It would ensure new private players did not face the problem of finance.

Why in News?

- The Ministry of Coal released the status of commercial coal mining in India.

International Relations

1) Chagos Archipelago Dispute



What is the Chagos Islands dispute about?

- Chagos Islands is a **disputed territory between Mauritius and the United Kingdom**.
- **Mauritius** has argued that the Chagos Islands has been a part of its territory since at least the 18th century, till the United Kingdom broke the archipelago away from Mauritius in 1965 to form the **British Indian Ocean Territory**.
- After Mauritius gained independence from the UK in 1968, the United Kingdom refused to return the Chagos Islands to Mauritius claiming that the island was required to use certain islands in the Indian Ocean for **defence purposes**.
- The largest island on the Chagos Islands archipelago, **Diego Garcia**, is where **the US and the UK operate a large military base**.
- In 2019, the **International Court of Justice** ruled that **Britain should give up control of the islands**.
- Later that year, the **UN General Assembly** adopted a resolution recognising that **“the Chagos**

Archipelago forms an integral part of the territory of Mauritius” and urged UN agencies **“to support the decolonisation of Mauritius”**.

What's in the news?

- The **Universal Postal Union (UPU)**, a UN agency in charge of the world's postal policies, voted to **block the use of UK stamps from the Chagos Islands**. All posts from the Chagos Islands must now bear stamps from Mauritius.
- Mauritius has welcomed the postal agency's decision, calling it a victory for the island nation in its dispute with London.
- Although Mauritius became independent in 1968, the Chagos archipelago **remained under British control**, sparking protests by Chagossians, who accuse London of carrying out an “illegal occupation” and barring them from their homeland.
- Britain insists the archipelago belongs to London and has renewed a lease agreement with the U.S. to use Diego Garcia, the largest of the islands, until 2036.

2) Greater Malé Connectivity Project

What is in the news?

- In a boost to ties, India and Maldives signed a contract on the mega Greater Male Connectivity Project (GMCP).
- GMCP is not only the **biggest project India is doing in the Maldives but also the biggest infrastructure project in the Maldives overall**. This iconic project will give a major boost to the Maldivian economy.
- The 6.7 km Greater Malé Connectivity Project will be the **largest civilian infrastructure project** in the Maldives, connecting **Malé** with three neighbouring islands -- **Villingili, Gulhifahu and Thilafushi**.
- The project will be bigger than the **Sinamalé Bridge** that was built under Chinese assistance. The Sinamalé Bridge is 1.4-kilometre-long. It connects Malé with Hulhule' and Hulhumalé and was completed in 2018.
- India will fund the implementation of the Greater Malé Connectivity Project through a **\$ 400 million Line of Credit (LOC) and \$ 100 million grant**.
 - *LOC is a preset borrowing limit that can be tapped into at any time. The borrower can take money out as needed until the limit is reached, and as money is repaid, it can be borrowed again in the case of an open line of credit.*
- The GMCP project is considered as the economic lifeline for the Maldives and will provide a major boost to connectivity between the four islands accounting for about half of the Maldivian population.

Strategic significance

- Amid New Delhi's growing concern over China's growing influence in the region, the ties with the Maldives have remained under sharp focus.

- The GMCP project is emblematic of the strong development partnership which is multi-faceted and designed to meet the specific requirements of the government and people of Maldives.
- India deeply appreciates the Maldives government of President Solih for its '**India First**' foreign policy. This is reciprocated in full measure by India's '**Neighbourhood First**' policy in which the Maldives enjoys a very special and central place.

3) Indus Water Treaty

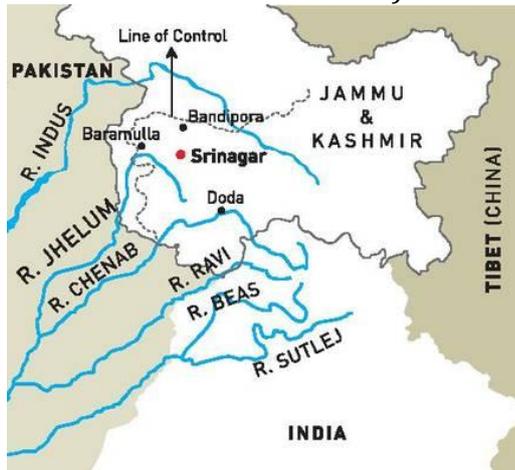
What is the Indus Water Treaty (IWT)?

- Signed in the year **1960** by **former Prime Minister Jawaharlal Nehru and the then President of Pakistan, Ayub Khan**, the Indus Water Treaty is an agreement that was made to chalk out the control over the 6 rivers that run across India and then Pakistan into the Indus basin.
- This treaty was signed following the partition of the subcontinent.
- On an international level, the IWT has been seen as one of the most successful cases of conflict resolution. It is so because India and Pakistan, ever since IWT was signed, have engaged in 4 major wars but the treaty has stayed in place.

Which rivers belong to India and which ones to Pakistan?

- The Indus Waters Treaty was signed in 1960 after nine years of negotiations between India and Pakistan with the help of the **World Bank**, which is also a signatory.
- Precise details were laid out about how the water will be divided.
 - While **Jhelum, Chenab and Indus** (3 western rivers) were allocated to Pakistan, India received the control of

Ravi, Beas and Sutlej (3 eastern rivers).



- In effect, Pakistan got 80% of the water from the Indus river system and India 20%.
- If **disputes arose**, the two parties would try to solve them bilaterally first. Appointing a “Neutral Expert” and approaching the International Court of Arbitration are other options.
- The treaty also stated that aside from certain cases such as specified domestic, non-consumptive and agricultural use permitted to India, no storage and irrigation systems can be built by India on the western rivers.

Why in News?

- The Standing Committee on Water Resources has recommended renegotiating the Indus Water Treaty with Pakistan to address the

impact of climate change on water availability in the river basin, along with other challenges which are not covered under the agreement.

- The parliamentary panel has also recommended that India should constantly monitor the Chinese actions to ensure that they do not pursue any major interventions on the Brahmaputra river which could adversely affect India's national interests.

Need to renegotiate the treaty

- The Treaty was framed on the basis of knowledge and technology existing at the time of its agreement in the 1960s and the perspective of both the nations at that time was confined to river management and usage of water through construction of dams, barrages, canals and hydro-power generation and as a result present day issues such as **climate change, global warming and environmental impact assessment etc were not taken into account** by the treaty.
- There is a need to renegotiate the treaty so as to establish some kind of **institutional structure or legislative framework to address the impact of climate change** on water availability in the Indus basin and other challenges which are not covered under the treaty.

Art and Culture

1) Abanindranath Tagore

Who is Abanindranath Tagore?

- He is the **nephew of Rabindranath Tagore**, helped shape modern Indian art and was the creator of the **iconic 'Bharat Mata' painting**.
- Abanindranath Tagore was arguably the first major exponent of an artistic idiom that sought to **modernise the Mughal and the Rajput styles** in order to counter the influence of Western models of art under the colonial regime.
- His unique interpretation of swadeshi themes created a new awakening and heralded a revival of Indian art.

- **Mughal miniatures** influenced his ideas.
- Popular paintings by him are **Bharat Mata, My Mother, Journey's End, The Passing of Shah Jahan, series of work on Krishna Lila, The Arabian Nights etc.**
- Popular books Written by him are **Khirer Putul, Nalak, etc.**

Why in News?

- Year-long celebrations marking 150 years of Abanindranath Tagore were started recently.

Defence

1) Al-Mohed Al – Hindi Exercise

What's in the news?

- The sea phase of the maiden bilateral exercise 'Al-Mohed Al – Hindi' between **Indian Navy and Royal Saudi Naval Force** was held recently off the coast of Al Jubail, Saudi Arabia.
- It saw the two navies undertake co-ordinated action against asymmetric threat, replenishment at sea procedures, anti-piracy and boarding operations.
- Complex and collaborative exercises including weapon targeting drills beyond the horizon were also conducted to enhance synergy and inter-operability between the two navies.

2) Exercise INDRA

About

- It is a joint military exercise between **India and Russia**.
- The aim of the exercise was to acquaint each other with operational planning, procedures, combat drills and conducting joint operations against international terrorist groups.

What's in the news?

- The 12th edition of the Indo-Russia joint exercise INDRA was conducted recently at Volgograd, Russia.

3) Defence India Startup Challenge

What's in the news?

- Defence minister Rajnath Singh has launched the fifth edition of Defence India Startup Challenge (DISC 5.0) **under Innovations for Defence Excellence - Defence Innovation Organisation (iDEX-DIO)**.
- The challenge is meant to **achieve self-reliance and foster innovation and technology development in the defence and aerospace sectors**.

- Thirty five Problem Statements were unveiled under DISC 5.0. These are in areas such as Situational awareness, Augmented Reality, Artificial Intelligence, Aircraft-trainer, Non-lethal devices, 5G network, Under-water domain awareness, etc.
- The launch of DISC 5.0 comes three years after the launch of DISC 1.0.

About iDEX-DIO

- In order to engage smaller enterprises, startups and innovators to supply the Indian military with innovative and ingenious technological solutions, the Innovations for Defence Excellence (iDEX) framework was formulated and approved by the Ministry of Defence in 2018.
- iDEX is funded and managed by the **"Defence Innovation Organisation (DIO)"** formed as a **"not for profit" company** as per Section 8 of the Companies Act 2013 for this purpose.
- iDEX-DIO with the primary objective of self-reliance and indigenization in the Defence & aerospace sector of the country bolsters the **"Atmanirbhar Bharat Abhiyan"** of the Government.