

MONTHLY

EPIC!

*Supplementary reading material for MGP and Current Affairs classes of
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PRELIMS + MAINS

PREPARATION

August 2022

I enrolled myself in the Forum Mains Guidance Program + for GS and Essay test series. The answer writing practice and written feedback from Forum alongwith 'Best answers' and topper's copies provided helped me improve my answers and get a high score in my General Studies papers.

Ayush sir's regular articles were also fun and encouraging reads - I thank the ForumIAS team for their guidance during my two year association with them.

Shruti Sharma
AIR 1, CSE 2021

forumIAS has been an integral part of my upsc journey, right from my very first attempt. The prelims and mains test series have helped me a lot and I have referred to them in all my three attempts. One on one session with Ayush sir for interview ~~was~~ beneficial too. Always enjoy reading his articles on the forumIAS blog.

With Best wishes,



Vikash Dwivedi
AIR 5, CSE 2021

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Focus Article

The Issue of Freebies

News: The recent remarks by the Prime Minister on 'freebies' culture has given rise to an intense debate on the 'freebies vs development expenditure'. A petition before the Supreme Court has sought to deregister the political parties promising irrational freebies.

What is the meaning of Freebies? – (1) The literal meaning of freebie is something that is given free of charge or cost; (2) The Political parties promise a lot of free goods and services in their election manifestoes. These include promise of free electricity and water supply, laptops, cycles, electronic appliances, etc.; (3) Many economists and administrators have called out these 'freebies' as fiscally imprudent.

What are subsidies? – A subsidy is the **unrecovered cost** of any service (or good) provided by the Government. The unrecovered cost is the deficit between the receipts and expenditure of a government department in providing the service.

What are the various kinds of free goods and services provided by the Government? – According to an expert at Centre for Development Studies (CDS), various goods and services provided by the Government free of cost or subsidized rate can be classified into: (a) **'Highly visible' and 'discussed' freebies:** The most notable freebies include, free televisions distributed in Tamil Nadu, free cycles distributed in Bihar, and laptops distributed in Uttar Pradesh. These subsidies are at the centre of the current debate; (b) **'Other visible' subsidies:** These include subsidies on food and fertilizers. They are fiscally much more significant than the 'highly visible' subsidies and **remain a major source of fiscal stress on the Government budget;** (c) **Invisible subsidies:** These include subsidies in the **State Government Budgets**, not always recognised as such, but which are also very large (e.g., free electricity); (d) **Other subsidies:** These include freebies of pure cash grants for poor households.

Liquor, Cash, Freebies Swing Votes: ADR Survey

The Association for Democratic Reforms (ADR) had conducted a survey in March 2019 to **identify voters' priorities on specific governance issues and the factors affecting voting behaviour.**

- ADR reported that for 41.34% respondents distribution of liquor, cash and freebies was an important factor in their voting behaviour.
- According to the survey, better employment opportunities, better healthcare and drinking water were top 3 priorities for voters.
- The Survey also revealed that voting behaviour was largely driven by following factors:
 - **First Priority:** Parties' Chief Ministerial candidates.
 - **Second Priority:** The party to which a candidate belongs.
 - **Other Factors:** Candidate's profile, candidate's caste and religion and distribution of gifts.

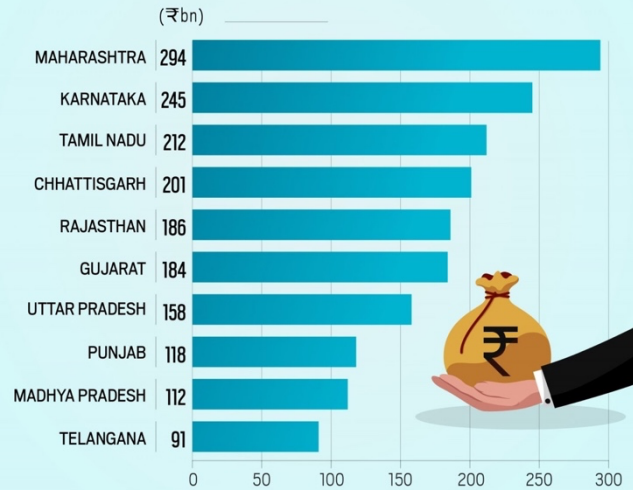
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What is the status of the subsidies in India? – (1) **Subsidy-GDP link:** According to a study undertaken by CDS, the volume of subsidies as a proportion of GDP comes down with rising per capita incomes e.g., the total volume of subsidies had come down from 13% of GDP in 1987-88 to ~10% by 2015-16; (2) **High Proportion:** Some economists argue India spends very high amount on subsidies e.g., the total subsidy in Germany is 0.9% of its GDP and 0.4% in France. In India, agricultural subsidies alone amount to 2.25% of the GDP; (3) **Major provider:** State governments provide the bulk of these subsidies, mainly for social services like education and health. The central government accounts for less than 30% of total subsidies, provided mainly for economic services including food; (4) According to the RBI, **State governments have announced over INR 1 trillion in welfare schemes and subsidies.** Andhra Pradesh, Madhya Pradesh, and West Bengal have the largest welfare scheme announcements this year. They collectively account for over INR 67,000 crore worth of schemes in 2022-23.

Why are political parties resorting to such promises? – (1) **Poor Performance:** Freebies are promised by incumbent Governments to conceal their poor performance on governance, economic and social parameters. To stay in the contest, all parties in the fray, make such promises; (2) **Continuity:** Once a freebie becomes established, it is difficult to overturn it due to fear of loss of voter base e.g., Several State Governments have been forced to continue power and irrigation subsidies due to political pressure; (3) **Myopic opinion of masses:** It is believed that Indian masses vote and react more on short term freebies and less on long term policies. This encourages parties to offer more freebies; (4) **Criminalization of Politics:** According to the Association for Democratic Reforms (ADR), 233 MPs in the current Lok Sabha are facing criminal charges. Candidates with dubious background often resort to distribution of liquor, money, goods etc. to lure voters; (5) **Political Compulsions:** The rise in regional parties led to arrival of coalition politics and intensification of political contests. Political parties adopt all possible measures to build their voter base. Promise of freebies is once such measure.

SUBSIDY BURDEN IN SOME STATES

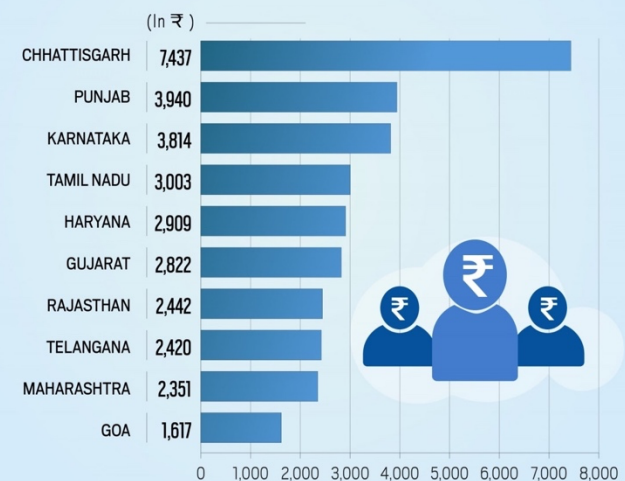
AVERAGE SUBSIDY GIVEN BY STATES DURING FY19-FY22



What is the need for welfare subsidies? – (1) **Welfare State:** The Constitution places an obligation on the State to take proactive measures for the welfare of the poor. **Art. 39(b)** calls for resource distribution for achieving common good. Some economists argue that ‘trickle down’ effect of economic development is absent, and welfare measures are necessary to uplift the poor; (2) **Addressing Inequalities:** The **OXFAM report 2021** showed that the income of 84% of households in the country declined in 2021, but at the same time the number of Indian billionaires grew from 102 to 142. Welfare measures help plug the gap; (3) **Protection against external shocks:** Subsidized food and free healthcare services provide cushion against external income shocks e.g., provision of free food during COVID-19 induced lockdowns prevented hunger. **Free vaccination** helped in management of the health emergency; (4) **Human Development:** Services like free education, **improve human development indicators, productivity of labour** besides other benefits. Schemes like Mid-Day Meal Scheme has led to increased enrolment and retention in schools; (5) **Social Stability:** Welfare measures enable the government to ease growing discontent among the marginalized sections; (6) **Empowerment:** Benefits provided under welfare measures like **PM Awas Yojana** have empowered the poor and contributed

CHHATTISGARH, PUNJAB GENEROUS WITH SUBSIDIES

AVERAGE PER CAPITA SUBSIDY GIVEN BY STATES FY19-FY22



to their self-reliance; (7) **Economic Push**: Welfare subsidies support savings which help increase the demand; (8) The government **provides several incentives to the corporate sector** like tax holidays to boost investments. Welfare subsidies provide a safety net to the poor.

What are the arguments against

Freebies? – (1) Undermines the spirit of Democracy:

Free incentives influence the voting behaviour as people do tend to vote for the parties promising free goods. This impacts the fairness of elections; (2) **Fiscal Stress**: Freebies generally fall under revenue expenditure. Excess spending on freebies creates fiscal stress and increases Government debt.

(Refer EPIC July 2022 for The State of

State Government Finances); (3) **Moral Hazard**: Debt waivers give rise to ‘moral hazard’ and an incentive to default. It also discourages those who repay their debts; (4) **Taxpayer discontent**: There is discontent among honest taxpayers. **Public services remain poor** and part of the blame is attributed to fiscal stress caused by freebies; (5) **Wastage and Unintended Consequences**: Free electricity is one of the reasons for poor status of DISCOMs. Analysts argue that poor financial status of DISCOMs has impacted their ability to actively encourage solar power and push for green energy. In Punjab, free electricity has contributed to over-irrigation and ground-water depletion; (6) **Unjustified beneficiaries**: Freebies often end up providing free goods/services to those who don’t need them the most and end up ignoring the poor; (7) **Economic Impact**: Economic experts argue that freebies distort prices through cross-subsidisation eroding incentives for private investment. They disincentivise work at the prevailing wage rate leading to a drop in labour force participation.

Judicial View on Freebies

S. Subramaniam Balaji vs Government of Tamil Nadu (2013)

- The Supreme Court had upheld the distribution of television sets or consumer goods.
- It said that the schemes targeted at women and the poorer sections were in **furtherance of Directive Principles**.
- However, it observed that distribution of freebies influences all people. It **‘shakes the root of free and fair elections to a large degree’**.
- As long as public funds were spent based approval by the Legislature, they **could not be termed a ‘corrupt practice’**.
- The SC directed the **Election Commission of India (ECI) to frame guidelines** to regulate the content of manifestos.
- The ECI modified the **Model Code of Conduct** to include a stipulation that parties should avoid promises *‘that vitiate the purity of the election process or exert undue influence on the voters’*. Manifestos should contain the rationale for a promised welfare measure and **indicate the means of funding it**.

SC’s Observations during hearings on Petition Against Freebies

- The SC remarked that ‘freebies’ were a serious issue and asked the Union Government to take a stand on the need to control the announcement of ‘freebies’ by political parties during election campaigns.
- The SC said that the freebies were paving the way for an **‘economic disaster’** and *‘distorting informed decision of voters’*.
- The SC suggested **setting up a specialised body** (like Finance Commission) which can dispassionately examine the question of freebies.
- To **de-register political parties** for promising freebies would be **‘anti-democratic’**.

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What is the need to eliminate non-merit subsidies? – Phasing out unwarranted freebies, will free up huge fiscal space for the government. This would enable a massive reduction in the combined fiscal deficit of the Union and the State Governments. It will also provide fiscal space to step up required expenditure on education, health and infrastructure. Welfare spending is woefully low in India e.g., public spending on health and education was 4.7% in India, compared to 7% in sub-Saharan Africa.

What should be the approach? – (1) **Expert Panel for Comprehensive Guidelines**: A panel of eminent economists, administrators and representatives from Political parties should be formed to provide comprehensive guidelines on welfare measures; (2) **Focus on Merit Subsidies**: As suggested by an Academic, the Policy makers should only allow ‘merit subsidies’ essential for public interest. These include subsidies on: (a) Food; (b) Health Services; (c) Education; (d) Housing, Water supply and sanitation. At present, these ‘merit’ subsidies account for ~33% of total subsidies. Others which are **‘unwarranted’** or **‘non-merit freebies’** (account for ~5–6% of GDP) can be eliminated; (3) **Expenditure Efficiency**: The focus should be on **improving public expenditure efficiency**. This requires emphasis on outcomes rather than outlays; (4) **Use of technology in direct transfer of benefits**: Identification of beneficiaries through the **Socio-Economic Caste Census (SECC)** and prioritisation based on **deprivation criteria** can enhance

efficacy of targeted interventions. Blanket promises like free electricity often end up transferring public resources to the affluent;

(5) Institutional Checks: There is a need to have an institutional mechanism to control wasteful expenditure. The FRBM Acts need to be amended to cover **all liabilities** of the government whether budget borrowing or off-budget borrowing;

(6) Enhance Government Revenues: Less than 6% Indians pay income tax. The Government is raising revenues equivalent to 0.2% of GDP through property tax (developing country average is 0.6%, OECD average 2% of GDP). Leakages must be plugged to enhance Governments' revenues and increase fiscal room for welfare expenditure;

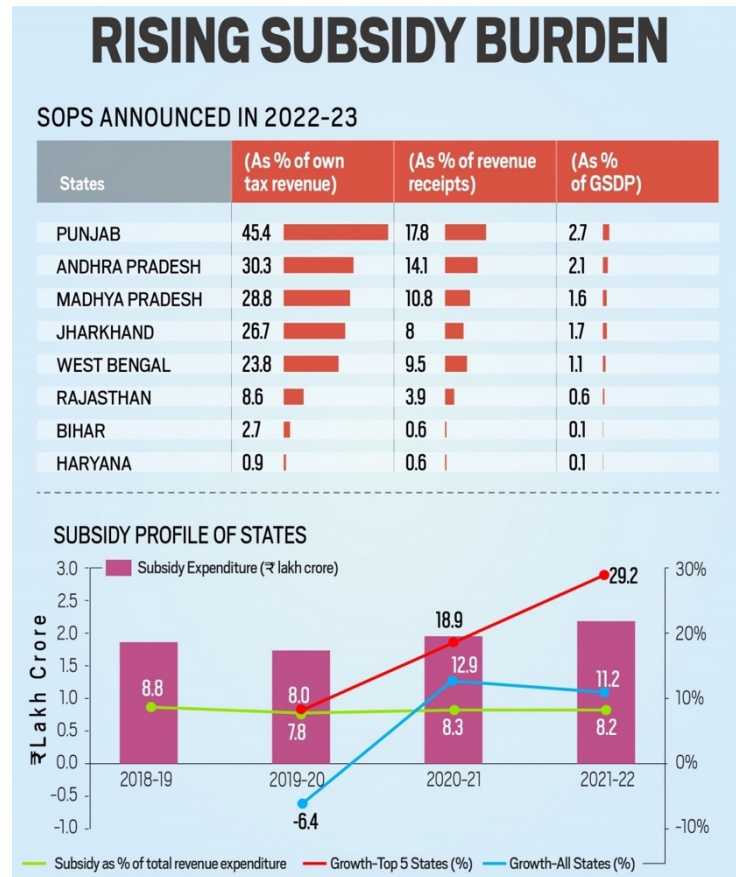
(7) Job Creation/Infrastructure: Government should use the money spent on freebies towards job creation and infrastructure development as **advised by Madras HC in 2021**. This will lead to social upliftment and progression of the State;

(8) In the long run, eradication of unnecessary freebie culture requires an attitudinal change in the general public. They should be able to question the political parties on how they intend to fulfil their promises;

(9) Strengthen Internal Party Democracy: This will check criminalization of politics and shift the political discourse toward development. It will improve performance of governance and reduce the need to resort to freebies to win elections;

(10) More Powers to the Election Commission: The Election Commission should be given greater powers like **the power of contempt** etc. This would curtail distribution of liquor and other goods during elections and ensure expenditure as per the desired limit.

India has experienced the **politics of freebies** for a long time and the outcome of those policies has been sub-optimal, inefficient, and unsustainable. Therefore, focus should be on **efficient expenditure**. The discourse on improving public expenditure efficiency should take centre-stage while discussing the role of fiscal policy in India.



General Studies Paper I

1. Parliamentary Standing Committee Report on Adoption Laws

News: The Parliamentary Standing Committee on Law and Justice has tabled the report on 'Review of Guardianship and Adoption Laws'.

What are the key highlights from the report? – (1) Equal Rights to mothers as guardians: The Report calls for amendment to the **Hindu Minority and Guardianship Act (HMGA), 1956** to accord **equal rights to mothers** as guardians; **(2) Joint Custody of Child:** There is a need to relook at the child custody in case of marital dispute. It is typically restricted to just one parent where mothers tend to get preference. The Courts should be empowered to grant joint custody to both parents when such a decision is conducive to the welfare of the child; **(3) Rights of LGBTQ Community:** The Report has proposed allowing the LGBTQ community to adopt children as well; **(4) Omit the word Illegitimate Child:** The HMGA Act, 1956 makes use of the term 'illegitimate' in reference to a child born out of wedlock. The Committee has recommended that the word 'illegitimate' should be omitted and the law should be the same for all children whether born within or out of wedlock.

What are the laws related to guardianship and adoption? – (1) Hindu Minority and Guardianship Act, (HMGA) 1956: Under this, the natural guardian of a Hindu minor in respect of the minor's person or property is the father and after him, the mother. Provided the custody of a minor who has not completed the age of 5 years shall ordinarily be with the mother; **(2) Muslim Personal Law (Shariat) Application Act, 1937:** It says that the Shariat or the religious law will apply in the case of guardianship. According to the law, the father is the natural guardian, but custody vests with the mother until the son reaches the age of 7 and the daughter reaches puberty. In addition, the father's right to general supervision and control exists; **(3) The current law on adoption of a child by LGBTQI:** Adoption Regulations, 2017 is silent on adoption by LGBTQI people and neither bans nor allows them to adopt a child.

What is the judicial view regarding guardianship? – In *Githa Hariharan v. The Reserve Bank of India* (1999) the HMGA was challenged for violating the guarantee of equality of sexes under Article 14 of the Constitution. The SC held that the term '**after**' should not be taken to mean '**after the lifetime of the father**', but rather '**in the absence of the father**'. But the SC failed to recognise both parents as equal guardians, subordinating a mother's role to that of the father.

What is the view of the Law Commission? – The Law Commission has recommended that both the mother and the father should be regarded, simultaneously, as the natural guardians of a minor (257th report on 'Reforms in Guardianship and Custody Laws in India').

2. Rising Elderly Population in India

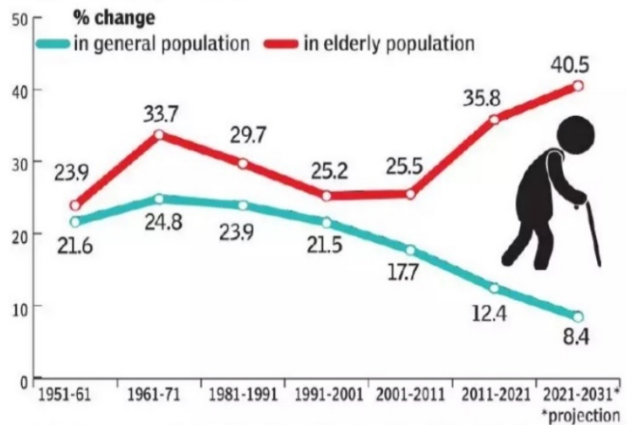
News: The UN World Population Prospects Report, 2022 has pointed to an ageing Indian demography. Ageing Population and elderly care is going to be a major policy concern.

Ageing refers to a demographic situation in which the **share of 60+ population** in the overall population steadily increases.

Why is ageing population a matter of concern for India? – (1) Though the proportion of **older persons** in the overall population is low (8.6%), their overall number is very high (104 million), as per the 2011 census. The

overall number is projected to be four times in 50 years, i.e., to reach **425 million** by 2061; (2) The proportion of the older population is **different in different states**. Different states of India are at **different stages of demographic transition**. Thus, their projected population share is going to range from 11.6% in Bihar to 23.9% in Kerala, by 2041; (3) Ageing in India is happening at a **quick pace**. In France and Sweden, the older population took 110 years and 80 years respectively to double its share from 7% to 14%. However, in the case of India, it is projected to take only 20 years to double. In 2061, every 4th person in India is expected to be 60+; (4) India is **ageing before becoming rich**. The poverty rates are higher among older persons. As per the **UN Population Fund 2012** study, 52% of the older population is fully dependent and 18% is partially dependent on others for livelihood. Further, a large number of older persons continue to work or are forced to work because of economic conditions. In 2021, almost 10% of the total workers in MGNREGA were 61 years or older; (5) The level of **social security coverage** and access to **health services** for the elderly is fairly low.

Decadal growth in elderly population compared to that of general population



Population Census Data, Report of the Technical Group on Population Projections November 2019, Population. Projections for India and States 2011-2036, Census of India 2011

What steps have been taken by the Government for the elderly? – (1) The government introduced a **National Policy on Senior Citizens** (2011); (2) **Indira Gandhi National Old Age Pension Scheme (IGNOAPS)**: The scheme provides an old-age pension for persons who are above the age of 60 years and belong to the BPL category; (3) **Rashtriya Vayoshri Yojana (RVY)**: The scheme provides Physical Aids and Assisted-living Devices for Senior citizens belonging to the BPL category; (4) **Pradhan Mantri Vaya Vandana Yojana**: The scheme aims to **provide social security during old age**. It also protects elderly persons aged 60 and above against a future fall in their interest income due to uncertain market conditions; (5) **Senior care Ageing Growth Engine (SAGE) Initiative and SAGE portal**: It aims to help start-ups interested in providing services for elderly care; (6) **Elderline**: A toll-free helpline number for elderly persons to provide emotional care, health and legal assistance through dedicated call centres.

National Policy on Senior Citizens, 2011

Focus of the Policy

- **Mainstream senior citizens**, especially older women, and bring their concerns into the national development debate.
- Promote the concept of '**Ageing in Place**' or ageing in own home, housing, income security and homocare services, old age pension and access to healthcare insurance schemes and other programmes and services to **facilitate and sustain dignity in old age**.
- Being a signatory to the **Madrid Plan of Action and Barrier Free Framework** it will work towards an inclusive, barrier-free and **age-friendly society**.
- Long term savings instruments and credit activities will be promoted to reach both rural and urban areas.
- **Employment in income generating** activities after superannuation will be encouraged.

Areas of Intervention

- **Income Security**: Indira Gandhi National Old Age Pension Scheme, PDS, Income Tax, Micro-finance etc.
- **Healthcare**: The goal would be good, affordable health service, heavily subsidized for the poor. Healthcare system would be strengthened to meet the health needs of senior citizens. **Geriatric care facilities** would be provided.
- **Safety and Security**: Provision would be made for stringent punishment for abuse of the elderly.
- **Housing**: 10% of housing schemes for urban and rural lower income segments will be earmarked for senior citizens.
- **Welfare**: A welfare fund for senior citizens will be set up and revenue will be generated through a social security cess.

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What are the challenges faced by the elderly population? – (1) **Neglect**: They face neglect due to nuclear family structure, western education and change in values etc.; (2) **Financial Vulnerabilities**: Lack of social security in informal sector results in poor financial security in the old age. India spends **only 1% of its gross domestic product on pensions**; (3) **Health-related Issues**: Older people are vulnerable to various diseases like blindness, heart-related ailments and mental health issues.

What steps are required to support the elderly population? - (1) **Strengthen Social Security:** This can be achieved through better funding and coverage. The Government should allocate a special budget for the elderly population; (2) **Old-age Homes:** The number and quality of care should be enhanced; (3) **Lifestyle Modification:** The Government also has to proactively work on lifestyle modification, non-communicable disease management, and accessible health care; (4) **Social Awareness:** This can be achieved by **changing the negative connotation attached to old age**. **Behavioural change** can be achieved through education, public awareness, and innovative measures such as **Switzerland's time bank**. Under this initiative, the younger generation will start to save 'time' by taking care of senior citizens. Later, they will use the saved 'time' when they get old, sick, or in need of someone to take care of them.

3. Care Work and Care Economy

News: The demand for care work has soared since the onset of the Pandemic in 2020. However, investments and policy measures to support care economy has lagged. The ageing population of India further increases the importance of care economy in India.

What is Care Work? - (1) The ILO describes care work as '**the activities and relationships involved in achieving the physical, mental, and emotional needs of kids and adults, old and young, physically weak and able-bodied**'; (2) Care workers in care occupations deliver health, social and education services with the support of other workers. Care staff include medical practitioners, child care, personal care and domestic work staff; (3) Care work includes both immediate care tasks like feeding a baby or nursing a sick partner and indirect care operations like cleaning and preparing meals.

What are the reasons for rising demand for Care Work? - (1) **Demographic shifts** in middle- and lower-income nations are resulting in an increased proportion of the **elderly needing extensive care**; (2) **Rapid urbanization** is transforming traditional joint-family structures into nuclear, single-parent families, isolating them from community support bonds; (3) Rise in female employment has **reduced women's unpaid care work burden**. This has increased demand for paid care services in cities and urban areas.

Significance of Care Work

Care work, both paid and unpaid, is extremely important for any social system as well as the economy to survive.

- The indispensable aspect of care work was highlighted in the pandemic, when it became challenging to move ahead without the facilities of care staff.
- According to the ILO, doubling investment from 2015 levels would result in 117 million additional jobs opportunities by 2030.
- Because of the **relational nature of care**, such professions are **less probable to automation**.
- According to the ILO, countries which invest in a combination of childcare infrastructure and parental leave policies to offset the burden on women, have a **higher maternal employment to population ratio**.

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What is the need for India to focus on Care Economy? - (1) The care economy is a **major employer with significant growth potential**. As the country ages, the demand for care work; personal, household, and health care work, will rise. An ILO report states that investments in India's care economy could generate 11 million employments (of which ~33% will be of women); (2) Since many care staff move to other nations for employment, paid care work has always been a **significant source of capital inflows for India**. An emphasis on the care economy sphere could help boost India's foreign remittances; (3) Women and girls account for the majority of paid care staff worldwide and perform the majority of unpaid care work. Expanding Care economy can help improve India's extremely **limited female workforce participation rate** and ensure **gender-inclusive economic growth**; (4) At present, women's unpaid work is valued at 3.1% of GDP in India. Recognising AWWs, ANMs, ASHAs and domestic help (amongst others), as formal sector workers would allow their economic contribution to be counted in the GDP; (5) It will also help in achievement of **Sustainable Development Goal (SDG) 8** that aims to 'promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all'.

What steps have been taken by the Government towards the Care Economy? – The **Maternity Benefit Act, 2017** offers 26 weeks of maternity leave (ILO's standard mandate: 14 weeks) and mandates employers to provide **crèche facilities**. The **Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act** and **Minimum Wage legislations** have been made applicable to domestic workers in India.

What are the issues surrounding Care Work in India? – (1) **Wage Distortion**: Unpaid care work is associated with labour market disparities. The **undervaluation of unpaid care work leads to lower wages and deterioration of working conditions in care sectors**, in which women are largely over-represented. Care needs of care workers go unmet due to their low wages and long working hours; (2) **Lack of Rights**: Paid caregivers, such as domestic helpers and *anganwadi* workers in India, find it **difficult to access worker rights** e.g., India's 2.5 million women *Anganwadi* workers, Auxiliary Nurse-Midwives and Accredited Social-Health Activists (ASHAs) are not paid fixed monthly salaries in many States; (3) **Low Investments**: **India spends less than 1% of GDP on care work infrastructure and services**, including pre-primary education, maternity, disability and sickness benefits, and long-term care (ILO). In contrast, the US administration has allocated ~20% funds to the Care Economy sector under the US\$ 2.3 trillion American Jobs Plan; (4) **Implementation Issues**: Only 49% of employers had creche facilities in place. The absence of clear implementation guidelines, penalty provisions, or monitoring makes non-compliance pervasive; (5) **Paternity Leave**: There is lack of sufficient provisions for paternity leave despite its recognition as enabler for both mothers and fathers to better balance work and family responsibilities.

What steps should be taken to support the Care Economy? – (1) It is imperative to **create an identification mechanism for care workers** to create a pipeline that could be used to reach them; (2) An official **network of care workers** need to be created to link them with care seekers. It will create better working conditions; (3) The Government needs to **enhance the spending on the care economy** for ensuring an enabling environment for both paid and unpaid caregivers; (4) The Government needs to conceptualize an **action plan for improved care policies, care service provisions and decent working conditions**.

The ILO has proposed a **5R framework** for decent care work. The framework urges **Recognition, Reduction, and Redistribution of unpaid care work**, promotes **Rewarding care workers** with decent work, and enables their **Representation** in social dialogue and collective bargaining; (5) **Attitudinal change** should be brought to ensure that unpaid care work is shared between both men and women.

The 5R Framework for Decent Care Work: Achieving a high road to care work with gender equality

Main policy areas	Policy recommendations	Policy measures
Care policies	Recognize, reduce and redistribute unpaid care work	<ul style="list-style-type: none"> Measure all forms of care work and take unpaid care work into account in decision-making Invest in quality care services, care policies and care-relevant infrastructure Promote active labour market policies that support the attachment, reintegration and progress of unpaid carers into the labour force Enact and implement family-friendly working arrangements for all workers Promote information and education for more gender-equal households, workplaces and societies Guarantee the right to universal access to quality care services Ensure care-friendly and gender-responsive social protection systems, including floors Implement gender-responsive and publicly funded leave policies for all women and men
Macroeconomic policies		
Social protection policies		
Labour policies	Reward: More and decent work for care workers	<ul style="list-style-type: none"> Regulate and implement decent terms and conditions of employment and achieve equal pay for work of equal value for all care workers Ensure a safe, attractive and stimulating work environment for both women and men care workers Enact laws and implement measures to protect migrant care workers
Migration policies	Representation, social dialogue and collective bargaining for care workers	<ul style="list-style-type: none"> Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life Promote freedom of association for care workers and employers Promote social dialogue and strengthen the right to collective bargaining in care sectors Promote the building of alliances between trade unions representing care workers and civil society organizations representing care recipients and unpaid carers

Bridging gaps in existing policies and facilities to strengthen the care economy will bring the benefits of child development, ageing with dignity, and independent living as the population ages. Considering this, there is a need to prioritize public investments in care infrastructure and services for a more gender equitable post-COVID economic recovery. (Check EPIC March for Low Female Labour Force Participation in India).

General Studies Paper II

1. Prime Minister's Address to the Nation on the Independence Day

News: The Prime Minister addressed the nation from the historic Red Fort as India celebrated its 76th Independence Day.

What are the key points from the Prime Minister's address to the nation?

(1) Tribute to freedom fighters: Our freedom fighters faced brutality and cruelty during freedom struggle but shook the foundations of the British Empire. Today as we pay them our respects, we need to remember their vision and dream for India. Our country is grateful to Gandhiji, Bhagat Singh, Rajguru, Ramprasad Bismil, Ashfaqullah Khan, Rani Laxmi Bai, Subash Chandra Bose, Tatya Tope, Adivasi freedom fighters such as Birsa Munda, Tirot Singh, Alluri Sitarama Raju and all other freedom fighters who made sacrifices but were forgotten and not given their due.

(2) India as the birthplace of democracy: As we celebrate 'Azadi Ka Amrit Mahotsav', we need to salute our soldiers, police forces, and most importantly every citizen who combated many challenges and yet worked towards the vision of New India. Our nation has proved that we have the inherent strength coming from our diversity and the common thread of patriotism. India is an aspirational society where changes are being powered by a collective spirit. This soil has power; despite many challenges, India did not stop or bow down and kept moving forward.

(3) Har Ghar Tiranga: It is an example of an entire nation coming together to celebrate the spirit of our glorious country. The nation's enthusiasm for "Tiranga" symbolizes nation's reawakening.

(4) World looks at India with pride: The way the world is viewing India is changing. The world today looks at India with pride, hope, as a problem solver, and a destination where aspirations are met.

(5) PM lists 5 pledges for developing India by 2047: I urge youth to dedicate the next 25 years of their lives for the nation's development; we will work towards the development of the entire humanity. Five pledges for 2047: having developed India, removing any sign of servility, pride in heritage, unity, and fulfilling our duties.

(6) Aatmanirbhar Bharat: For the first time in 75 years, a Made-in-India gun has been used for ceremonial gun salute from Red Fort. Through PLI schemes, we are becoming a manufacturing powerhouse of the world. People are coming to India to 'Make-In-India'. India needs to become self-reliant in new-age technologies, including solar power, wind power, mission hydrogen, biofuel, electric vehicle and so on.

(7) India's 'techade': Digital movement with production of semiconductors, 5G, and optical fibre show our strength to change common man's lives by bringing revolution to the grassroots. Today, we are seeing the Digital India initiative, start-ups growing in the country, and a lot of talent is coming from Tier 2 & 3 cities.

(8) Dynasty politics and corruption: Many of our institutions are affected by family rule, it harms our talent, nation's capabilities and gives rise to corruption. It is our effort that those who have looted the country will have to pay back. In India, where people are fighting poverty, we need to first fight against corruption with all our might.

(9) New Education Policy: NEP lays emphasis on skills that will give people the strength to be free from slavery. It has been formulated with a lot of brainstorming, exchange of ideas from various people and is at the root of the country's education policy. By emphasising learning in the mother tongue, the language barrier that might restrict talent has been removed. PM urged the people to discard the mindset of 'Ghulam' that makes us seek certificates from foreign powers.

(10) Respect Women, Support Nari Shakti: Saluting the role of women in India's struggle for independence, PM said that every Indian is filled with pride when they remember- Rani Laxmibai, Jhalkaribai, Chennamma, Begum Hazrat Mahal and many more. Women are an important pillar of India's growth. He stressed the need to extend

support to 'Nari Shakti' and to change the mentality towards our women in everyday life. Pride of Nari Shakti will play a vital role in fulfilling the dreams of India.

2. Lack of Inner-Party Democracy in India

News: The British Conservative Party has ousted their leader Boris Johnson who had to resign. An intense contest is going on between prospective candidates to choose the new leader of the Party and the Prime Minister for the remaining term. Political Analysts have contrasted the situation in India where lack of inner-party democracy prevents such contests and debates for leadership positions.

How is the situation in India in contrast to the UK? – (1) In India, the Prime Minister **exercises absolute authority** over the party MPs. The ability of the MPs to diverge even slightly from the official position of the government on routine policy matters is almost non-existent; **(2)** The situation is identical in opposition parties where the Party MPs/MLAs can't diverge from official party positions; **(3)** The control of the leadership is further **strengthened by the anti-defection law**. (Refer EPIC July

2022 for Issues with the Working of the Anti-Defection Law). Any MP/MLA who differs in position from Party leadership is susceptible to be dismissed. **MPs do not have any autonomy** to question and challenge their party leadership; **(4)** In India, it is the party leadership that decides candidates in election, with an informal consultation with the local party. This puts pressure on the MPs/MLAs to please the Party leadership.

These factors are the biggest stumbling blocks toward ensuring inner-party democracy in India.

In contrast, the MPs in the UK do not owe their nomination to the party leader, but are selected by the local constituency party. Also, MPs in the U.K. does not face a risk of disqualification if they speak out against the leader.

What steps can be taken to ensure inner-party democracy? – (1) Borrow the model from the UK: In the

UK, individual Conservative. MPs can write to the 1922 Committee expressing that they have 'no-confidence' in their leader. If there is support of more than 15% MPs, then the leader is forced to seek fresh mandate from the Parliamentary Party. The Westminster model (Britain) dictates that control over candidates must shift from Central party leaders to Local party members; **(2) Empower MPs:** Parliament should consider

Latest Political Developments in the United Kingdom

- The British Prime Minister (the leader of the Conservative Party) survived a **vote of no-confidence by his own Party Members of Parliament (MPs)**.
- However, many senior Ministers from his Cabinet resigned. So, he chose to resign from the Party leadership. He will resign as PM once the new leader is chosen.
- The **election process to chose the new leader** (and the new PM for the remaining term) is underway.
- The process of choosing the Party leader has two stages:
 - **Stage I:** Party MPs chose 2 candidates for the position of leadership. 8 party leaders had announced to contest. After series of voting and eliminations, only 2 candidates remained.
 - **Stage II:** The 2 candidates selected in stage 1 face a ballot of Party members. This is done on the basis of one member one vote. The candidate who receives the most votes wins.

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1922 Committee

It is formally known as the **Conservative Private Members' Committee**. The committee consists of all **Conservative backbench members** of the House of Commons. It meets weekly while Parliament is in session and provides a way for backbenchers to co-ordinate and discuss their views independently of frontbenchers.

Backbencher MP

In the UK, a **backbencher** is an MP who occupies no governmental office and is not a frontbench MP.

Frontbencher MP

In the UK, the Government **frontbench** is traditionally called the Treasury bench and is occupied by **Government ministers**.

empowering its elected representatives, to ensure accountability for party leadership. For this, an exception has to be made to the anti-defection law.

3. Issues in Fiscal Federalism in India

News: At a meeting of the Governing Council of the NITI Aayog, State Governments expressed their concern regarding centralization of revenues and dwindling ability of the States to spend on welfare schemes.

What is the status of States' revenues and expenditures? – (1) The ability of States to finance current expenditures from their own revenues has declined from 69% in 1955-56 to less than 38% in 2019-20; (2) States still spend 60% of the expenditure in the country – 85% on education and 82% on health; (3) The expenditure of the States has been increasing, but their revenues haven't increased commensurately. Their revenue has been stagnant at 6% of GDP in the past decade.

What are the recent instances that hamper fiscal federalism? – An Academic from Madras Institute of Development Studies have pointed out several concerns: (1) The GST regime has hampered the capacity of States to raise revenue; (2) The **Fourteenth Finance Commission** had increased the share of devolution from 32% to 42%. But, an **increase in the non-divisive pool (i.e., not shared with the State Governments) in the Centre's gross tax revenues** hampers revenue transfer to States. According to some reports, the States' share in taxes collected by the Union Government has been between 29-32% since the pandemic hit in 2020-21. The proportion of revenue raised by the Union Government from cess and surcharges (non-divisible pool) has risen from about 6% in 2014 to almost 25% now; (3) States are forced to pay **differential interest**: about 10% against 7% – by the Union for market borrowings; (4) **Centrally Sponsored Schemes**: (a) There are 131 centrally sponsored schemes. The Schemes reduce the autonomy of the States in deciding their expenditure; (b) CSSs are driven by the one-size-fits-all approach and are given precedence over State schemes

What are the negative impacts? – (1) India has a very low tax base and a regressive indirect taxation system; (2) Lack of consistency has led to failure to tax agriculture income. Now the Government is reducing corporate tax. No wealth tax is levied in India. Moreover, indirect tax (a regressive tax) accounts for 56% of the total taxes.

According to the academics, overall, India's fiscal federalism driven by political centralisation has deepened socio-economic inequality and has not altered inter-state disparities either.

PT BOX

Progressive and Regressive Tax

A progressive tax takes a larger percentage from high-income earners. Current regime of **Income tax** in India is **progressive tax** as the income in higher brackets is taxed at higher rate. (e.g., Income < 2.5 lakhs is exempted from tax, Income > 15 Lakhs is taxed at 30%).

A **regressive tax is a tax applied uniformly**, taking a larger percentage of income from low-income earners than from high-income earners. **GST is a regressive tax** as the **tax rate is same for the rich and poor**.

What are the arguments in favour of providing more resources to the State Governments? – (1) State's administrative machinery is on the front line of delivering growth and development; (2) It is the main touchpoint between the citizen and the government; (3) Underfunded states lead to **poor provision of public services**, with deleterious effects on both citizen welfare and the growth potential of the economy.

What are the arguments in favour of providing more resources to the Union Government? – (1) The Union Government has spending commitments and needs resources to finance national security needs and to run welfare programs; (2) The State governments are often alleged of inefficient and ineffective utilization of funds. Further, the quality of spending is also debated.

What should be done? – (1) In terms of spending, **reforms** are needed at both levels of the Government; (2) The **division of resources** should be done more transparently; (3) The Union Government shouldn't resort to imposition of excessive cess and surcharge, as it distorts the tax system and creates inefficiencies. The Union and State Governments should work together to take the development process forward.

4. RTI Act: Benefits and Concerns

News: There are many success stories of the RTI Act, 2005. However, certain pressing concerns associated with the functioning of the Act limit its efficacy.

What is the significance of the RTI Act? – (1) **Anti-corruption tool:** In the past 17 years, it has

been instrumental in uncovering major scams like Adarsh Society Scam, 2G scam, Commonwealth Games Scam, Indian Red Cross Society etc. The success of the Act earned it the 4th place among 111 countries in the annual rating of empowering laws across the world in the year 2016; (2) **Empowered people's voice:** The

Act has empowered people with the right to ask questions of Government authorities, **containing corruption** in the working of the Government; (3) **Strengthened Democracy:** Every citizen has the right to claim information from public authorities under the Act. Public authorities have an obligation to provide the sought information to the applicants (with certain exceptions). This has strengthened democracy through active participation of the public; (4) **Transparency and Accountability:** A large amount of information has to be placed in the public domain as prescribed under the Act. This has ushered in an era of transparency and accountability.

Salient Features of the RTI Act

- Under the RTI Act, **Public Authorities are required to make disclosures** on various aspects of their structure, functioning, powers/duties of employees, and the decision making process.
- **Section 4** of the Act calls for **proactive disclosure of information** by all authorities.
- **Section 8** of the Act provides **exceptions to the disclosure of information**, basis which sharing of information can be denied e.g., in the interest of sovereignty and integrity of India, information forbidden to be published by a Court of Law, Trade Secrets/Intellectual Property etc.
- The public authorities have to designate some of its officers as **Public Information Officer (PIO)**. They are responsible to give information to a person who seeks information under the RTI Act.
- The Act has established the **Central Information Commission** at the Union level and **State Information Commission** in each State. The **Commissions address public grievances** against public authorities in case of non-fulfilment of obligations under the Act.
- The Act requires that PIOs shall provide information within 30 days.
- An appeal can be made to a departmental Appellate Authority, (a senior officer in the same public authority). A second appeal can also be made to the Information Commission if the decision of the Appellate Authority is not satisfactory.
- Information is very broadly defined. It includes **Obtaining certified copies** of documents or records; **Inspecting records**; and **Inspecting public works** etc.

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How has the RTI Act performed in recent times? – (1) **Low usage:** Between 40–60 lakh RTI applications are filed every year, but less than 3% Indian citizens have ever filed an RTI plea; (2) **Poor Rate of Disclosure:** A '**Report Card of Information Commissions in India, 2018-19**' (released by the Satark Nagrik Sangathan (SNS) and the Centre for Equity Studies (CES)) revealed that, of the applications filed, **less than 45% received the information they had sought**. Of the rest 55%, less than 10% filed appeals; (3) **Low Staffing:** According to a study by the Commonwealth Human Rights Initiative, between 2012-13 and 2018-19, the **number of RTI pleas with various Union Government offices rose by 83%** (from 8.86 lakh to 16.30 lakh). The **number of CPIOs mandated to handle them increased by only about 13%** (from 21,204 to 24,048); (4) There has been a sharp fall in the mandatory reporting of data by Ministries and Departments to the CIC.

What are the issues associated with the functioning of the RTI Act? – (1) Threats to RTI

Activists: According to the Commonwealth Human Rights Initiative (CHRI), across India, 99 RTI activists have lost their lives, 180 have been assaulted and 187 have been threatened

since 2006; **(2) Shortcomings of CICs and SICs:** (a) There are a considerable number of vacancies and many commissions are functioning without the Chiefs e.g., the Government of Andhra Pradesh took over a year to appoint 3 information commissioners, that too after the intervention of the Supreme Court, while the post of State Chief Information Commissioner had been vacant for over 2 years; (b) The Information Commissions have become a place for adjusting retired government officials. According to the 2018-19 SSN-CES 'Report Card', of the 374 information commissioners appointed in the SICs since 2005, over 58% were former government officials. Of the 115 Chief Information Commissioners, over 83% were retired government servants, with 64% cent from the IAS; (c) According to a former CIC (and bureaucrat), the functioning of the Commissions has been stifled by poor choice of commissioners, untrained staff and a non-cooperative set of public information officers (PIOs); **(3) Rising Pendency:** As on June 30, 2021, 2.56 lakh appeals were pending with 26 Information Commissions in the country. As for the Central Information Commission ~37,000 appeals and complaints were pending in October 2020. Though the number came down to 26,500 in July 2022; **(4) Judicial Bottlenecks:** Several RTI cases are embroiled in judicial procedures as courts are quick to give stay orders on CICs' decisions. However, the Act clearly states that the final appeal lies with the information commissions, so the appeals are masked as writs to obtain relief from the Judiciary; **(5) Downgrading status of Information Commissioners:** The salaries, allowances and other terms of service of information commissioners are now decided by the Union Government while earlier these were at par with the Election Commissioners. In 2019, the Union Government reduced the fixed tenure from 5 years to 3 years; **(6) Low awareness level:** Awareness about RTI is still very low. Awareness level is low, especially among the disadvantaged communities such as women rural population, OBC/SC/ST population.

Public Authority under the RTI Act

"Public Authority" means any authority or body or institution of self- government established or constituted:

- By or under the Constitution.
- By any other law made by Parliament.
- By any other law made by State Legislature.
- By notification issued or order made by the appropriate Government, and includes any:
 - Body owned, controlled or substantially financed.
 - Non-Government organization substantially financed, directly or indirectly by funds provided by the appropriate Government.

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What steps can be taken to enhance the efficacy of the RTI Act? – (1) A code of conduct must be evolved for the Central and State Information Commissioners; **(2)** The Supreme Court's guidelines in *DDA vs Skipper Construction (P) Ltd* should be followed in letter and spirit. It said; **(a)** High Courts must resist the temptation to exercise their writ jurisdiction in order to correct errors made by the SICs/CICs; **(b)** If the High Court quashes a CIC/SIC order, it must categorically find that the order was without jurisdiction or palpably erroneous; **(3)** There is a need to raise awareness amongst the people and organizing **rigorous training of government officials**; **(4)** It is imperative to ensure freedom of the press and democratic institutions and ensuring complete autonomy of the information commissions; **(5)** All the information associated with the RTI Act and its functioning must be made available in the local language considering the diverse nature of our country.

Since the implementation of the RTI Act, it has established itself as an important tool in handling corruption and inefficiency in the Government. The need of the hour is to remove the loopholes in RTI to further the objectives of transparency and accountability.

5. Whistle-blower Protection in India

News: Two whistleblowers, associated with Panama Papers and Uber File revelations, did interviews with media outlets. Transparency Activists claim that such revelations are not possible in India because of poor framework to protect the whistleblowers.

What is the meaning of whistleblowing? – Whistleblowing means revealing some information in front of the public. The information can be about public or private organizations/institutions about activities which are deemed to be illegal, immoral or fraudulent.

What is the Whistle-blower Protection Framework in India? – (1) Whistle-blowers Protection Act, 2014: The Act aims to protect people who disclose act(s) of corruption, misuse of power or commission of a criminal offense by a public servant. Under the Act, the Vigilance Commission can't disclose the identity of the complainant except to the head of the department if deemed necessary. The Act penalizes any person who has disclosed the identity of the complainant; **(2) Public Interest Disclosure and Protection of Informers (PIDPI) Resolution:** It was introduced in 2004 to log complaints against corruption or misuse of office by a public officer. The **Central Vigilance Commission (CVC)** is designated agency to administer complaints; **(3) Companies Act, 2013:** Section 206-229 in the Companies Act, 2013 are associated with inspection and inquiry matters; **(4) Securities and Exchange Board of India:** It has mandated that every company listed under SEBI must have a whistle-blower. From December 2019, SEBI has also introduced a **reward mechanism** as a kind of inducement to **Informants** who report a violation of insider trading laws to SEBI.

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India is a signatory to the UN Convention against Corruption in 2005. The Convention talks about the reporting of corruption done by the public or private entities and protecting the spectators and whistle-blowers from retaliation.

What is the need to strengthen Whistle-blower Protection Framework? – (1) Augmenting Transparency and Accountability: A strong framework would enable upright employees to come forward and reveal any corrupt activity in the organization. It will **enable good corporate governance** and provide an early warning system for potential crises, such as the one at IL&FS in India; **(2) Protecting Citizen Rights:** It will help whistle-blowers to come forward and reveal acts of the Governments that undermine rights of the citizens; **(3) Preventing Hardships to whistle blowers:** Due to lack of adequate protection, whistle-blowers face multiple hardships like loss of livelihood (forced to quit jobs), threats, harassment and even death e.g., 99 RTI Activists have lost their lives; **(4) Legislative Lacunas:** The Companies Act and the SEBI rules cover only listed companies. A large number of unlisted companies including start-ups remain outside the purview of whistle-blower protection framework. The internal mechanism mandated under the Company Act remains subordinate to the management of the company. A whistle-blower will remain susceptible to management's whims. The 2014 has several loopholes.

Shortcomings of the Whistleblower Protection Act, 2014

- Whistle Blowers Protection Act 2014 is limited to public servants and **doesn't cover private companies**.
- The competent authority to whom any complaint on victimization can be made is a senior official in the hierarchy. This makes it **difficult for the informant to complain against retaliation** or receive any protection.
- The Act **does not allow anonymous complaints** to be submitted. Anonymous complaints are not investigated.
- The Government is criticized for **failure to frame the rules to operationalize the Act**.
- The Act does not provide for any reward to a whistleblower upon successful investigation of the claims.

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What should be done to strengthen the Whistle-blower Protection Framework? – (1) The Whistle-blowers Protection Act should be amended to provide universal protection to the whistle-blowers. Many States in the US (like Florida, Hawaii, Minnesota) have considered both public and private sector employers to be included under the whistle-blower's protection acts; **(2) The Government** must formulate the Rules

necessary to **operationalize the Whistle-blower Protection Act**; (3) A **robust reward mechanism** must be created for incentivisation. At the same time, fines against false and frivolous complaints also need to be enhanced; (4) The whistle-blowers should be given **freedom to report the complaint to independent authorities** rather than senior officials e.g., in the US, there are separate offices established under different laws with neutral investigators who are responsible for investigating any claims submitted to them. They are specifically designed to receive and investigate whistle-blower complaints.

The Government needs to ensure that whistle-blowers are given an enabling ecosystem wherein they are incentivized and not threatened. Strengthening the Whistle-blower Protection mechanism is necessary to enhance transparency and accountability in public institutions.

6. Supreme Court's Judgment on Prevention of Money Laundering Act (PMLA)

News: The Supreme Court has upheld various provisions of the PMLA and the powers of the Enforcement Directorate (ED). The Court has said that provisions related to arrest and bail are reasonable. Critics opine that this may result in misuse of the law.

What is the Prevention of Money Laundering Act? – (1) The **Prevention of Money Laundering Act (PMLA)** was enacted in 2002 and came into force in 2005; (2) Its provisions **gave effect to India's obligations to curb money laundering under International Conventions**; (3) The Act has been amended several times to make the law more robust. However, some amendments were undertaken through Finance Act (where Rajya Sabha has no control) which was questioned in the Supreme Court; (4) The Union Government argued that provisions of the PMLA and subsequent amendments were valid and necessary to fulfil India's obligations to combat the menace of money-laundering. The SC agreed with the Government's contention.

What is the SC Judgment on various Sections of the PMLA?

(1) Section 3: The Section defines the offence of money laundering. In the original Act, to prove the offence of money laundering, the prosecution had to establish that: (a) The accused was in possession of proceeds of crime and concealing it; (b) The accused was projecting the proceeds as 'untainted property' (i.e., clean money gained through legitimate means). In 2012, the Act was amended to bring it in line with the recommendations of the FATF. The SC upheld the amendment, observing that **projecting proceeds as untainted property is no longer necessary and mere possession and concealment will suffice as crime**. The Court held that generating black money is also money laundering, even without proof of actually laundering it or converting it to white money.

(2) Section 5, 8(4), 17 and 19: Under this, the ED has discretionary powers to attach property of the accused, enter and search suspected property **without judicial permission**. The Court **rejected the notion that the ED has been given blanket powers of arrest**,

search of person and property and seizure. The SC said there were 'in-built safeguards' within the Act, including the **recording of reasons** in writing while effecting an arrest.

(3) Section 24: The Section **reverses the usual burden of proof** in criminal law. In a PMLA case, **burden of proof is on the accused** to prove that the assets in question are not proceeds of

a crime. The SC upheld this provision and said that it did not suffer from "arbitrariness or unreasonableness".

Salient Provisions of the PMLA

- Prevention of Money Laundering Act was enacted to deal with money laundering and has three main objectives:
 - Prevent and control money laundering.
 - Provide for confiscation and seizure of property obtained from laundered money.
 - Deal with any other issue connected with money-laundering in India.
- The **Enforcement Directorate** is empowered to conduct a Money Laundering investigation.
- The provisions of this act are applicable to **all financial institutions** like banks, mutual funds, insurance companies, and their financial intermediaries.
- According to the Act, there can be punishment of **imprisonment up to 3-7 years with fine up to INR 5 lakh**.

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(4) Section 45: The Section deals with the **conditions of bail**. The SC **upheld the stringent 'twin bail conditions'** required under the law for granting bail to an accused. The SC said that stringent bail conditions can be imposed in exceptional circumstances such as anti-terrorism laws, but cannot be manifestly arbitrary. The SC relied on Article 39 of the Constitution to uphold the stringent bail conditions under PMLA. It is a part of the Directive Principles of State Policy that mandates the State to prevent concentration of wealth.

(5) Section 50: The SC held that proceedings under Section 50 **are an inquiry, not a criminal investigation. ED officers are not police officers and CrPC rules for investigation do not apply to the ED**. It is not mandatory for the ED to provide a copy of the Enforcement Case Information Report (ECIR) to the accused. For the same reason, **any statement recorded by the Directorate is admissible in evidence**.

What are the concerns associated with the SC Judgment? – (1) By upholding the reverse burden of proof condition for bail, the SC has overruled its own order in **Nikesh Tarachand Shah vs Union of India (2017)** that had declared the 'twin test' bail criteria as arbitrary and unconstitutional; **(2)** The list of crimes included in the PMLA overrides similar crimes in other parts of the law. It can override the safeguards of the Criminal Code of Procedure; **(3)** The burden of proof is on the accused. So, bail would be denied till proven innocent in the Court. Given the pendency in courts and long judicial process, incarceration in jail is violation of fundamental rights; **(4)** The conviction rate under PMLA is less than 0.5%. But registration of cases and arrests are very high; **(5)** There are concerns that the provisions of the PMLA and the ED can be used by the Government to target political opponents.

What lies ahead? – (1) The petitions had questioned the Amendments to the PMLA through Finance Act (Money Bill). The SC has referred the issue to the larger bench; **(2)** Various activists and organizations are contemplating filing review petition before the SC. There is possibility that the Judgment might be referred to a larger bench; **(3)** Setting up and strengthening institutions dealing with illicit money like the Directorate of Criminal Investigation Cell for Exchange of Information, Tax Research and Investigation Division of the CBDT is needed to reduce the menace of black money and money laundering.

Money laundering and its use in terror financing is a big security threat. However, critics argue that the stringent provisions of the PMLA are disproportionate to the threat and provide too much power to the ED. By upholding these provisions, the Court has diluted some well-established principles of criminal law. They call that the verdict must be revisited.

7. Data Protection Framework in India

News: The Union Government has withdrawn the Personal Data Protection Bill, 2019 from the Parliament. The Government is considering 'comprehensive legal framework' to regulate online space.

What was the criticism of the Bill? – (1) The technology companies had questioned a proposed provision in the Bill called **data localisation**. Under this, it would have been mandatory for companies to store a copy of certain sensitive personal data within India. The export of undefined 'critical' personal data would be prohibited; **(2)** The activists had criticized the provisions that allowed the Union government and its agencies **blanket exemptions** from adhering to any or all provisions of the Bill.

What were the recommendations of the Joint Parliamentary Committee? – (1) The JPC had called for expanding the scope of the proposed law to **cover non-personal data**. It had thus changed the mandate of the Bill from personal data protection to broader data protection. Non-personal data are any set of data that does not contain personally identifiable information; **(2)** It had recommended changes on issues such as regulation of

social media companies, and on using only 'trusted hardware' in smart-phones etc.; (3) It proposed that social media companies that do not act as intermediaries should be treated as content publishers. They should be liable for the content they host.

What is the need for Data Protection Law in India? – (1) Data Breaches: India has one of

the highest numbers of data breaches each year. Recently, sensitive data (Aadhar, Bank details) of ~28 crore Indian citizens in the EPFO database were leaked online; (2) **Large Userbase:** India has the second highest internet user base in the world. India has 450 million internet users and is expected to increase up to 730 million by 2020. A strong data protection law is needed to protect their personal data; (3) **Right to Privacy:** The Supreme Court in *K.S Puttaswamy vs Union of India (2017)*, maintained the right to privacy as an inherent part of the fundamental right under Article 21 of the constitution. A robust data protection law is necessary to implement the Judgment; (4) The delay due to withdrawal of the Bill will result in an unnecessary vacuum for many of the laws already taking shape, like the Criminal Procedure Identification Act; (5) It is necessary to curtail the perils of unregulated and arbitrary use of personal data. As most of the servers like Google and Facebook are outside India.

What is the status of Data Protection in other Nations? – (1) The EU: The EU has enacted the **General Data Protection Regulation (GDPR)**. It governs the collection, use, transmission, and security of data collected from residents of the EU. Fines of up to € 20 million or 4% of total global turnover may be imposed on organizations that fail to comply with the GDPR. Some important requirements include: (a) **Consent:** Data subjects must be allowed to give explicit, unambiguous consent before the collection of personal data; (b) **Data Breach:** Organizations are required to notify within 72 hours in the event of a data breach affecting users' personal information; (c) **Rights of the Users:** Data subjects (people whose data is collected and processed) have certain rights regarding their personal information.

The **e-Privacy Regulation (ePR)** are expected to come to force in 2023. ePR would create privacy rules for traditional electronic communications services and entities such as

WhatsApp, Facebook Messenger, and Skype; (2) **The US:** There is no single comprehensive federal law that governs data privacy in the US. But there are many sector-specific and State-specific laws e.g., The Children's Online Privacy Protection Act (COPPA) or the Health Insurance Portability and Accounting Act (HIPAA). Many States have own data protection and privacy acts.

Key Provisions of Personal Data Protection Bill, 2019 (Withdrawn)

- **Personal data definition:** Any information which renders an individual identifiable. Also, it defined data 'processing' as collection, manipulation, sharing or storage of data.
- **Territorial applicability:** The Bill included the processing of personal data by both government and private entities incorporated in India. It also covered the entities incorporated overseas if they systematically deal with data principals within the territory of India.
- **Grounds for data processing:** Data processing by fiduciaries was allowed if consent was provided by the individual.
- **Sensitive personal data:** It included passwords, financial, biometric and genetic data, caste, religious or political beliefs. The Bill specifies more stringent grounds for the processing of sensitive personal data, such as seeking explicit consent of an individual prior to processing.
- **Data Protection Authority:** The Bill provided for the establishment of a Data Protection Authority (DPA). The DPA would have been empowered to: (a) Draft specific regulations for all data fiduciaries across different sectors; (b) Supervise and monitor data fiduciaries.
- **Cross-border storage of data:** Every fiduciary shall keep a 'serving copy' of all personal data in a server located in India.
- **Transfer of data outside the country:** Personal data (except sensitive personal data which is 'critical') may be transferred outside India under certain circumstances.

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Rights of Users under the GDPR

- **The right to be informed:** Data subjects must be informed about the collection and use of their personal data when the data is obtained.
- **The right to access their data:** A data subject can request a copy of their personal data via a data subject request. Data controllers must explain the means of collection, what's being processed, and with whom it is shared.
- **The right of rectification:** If a data subject's data is inaccurate or incomplete, they have the right to ask to rectify it.
- **The right of erasure:** Data subjects have the right to request the erasure of personal data related to them on certain grounds within 30 days.
- **The right to restrict processing:** Data subjects have the right to request the restriction or suppression of their personal data (though it can still be stored).
- **The right to data portability:** Data subjects can have their data transferred from one electronic system to another at any time safely and securely without disrupting its usability.
- **The right to object:** Data subjects can object to how their information is used for marketing, sales, or non-service-related purposes. The right to object does not apply where legal or official authority is carried out, a task is carried out for public interest, or when the organization needs to process data to provide customized services.

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What should be done going ahead? - Legal and Privacy Experts have proposed that: **(1)** The new Law should focus on personal data and **exclude non-personal data**. Personal data protection falls in domain of privacy. Non-personal data regulation more related to economic aims. Brining in non-personal data, the Government had diluted the proposed law; **(2)** There must be **checks on the use of the data by the Government** and its Agencies. The new law must minimize the amount of data collected by security agencies and limiting how long it can be stored; **(3)** There is a **need for a strong data regulator**. The new regulator should work closely with other stakeholders like the RBI, TRAI etc. for sector specific regulations; **(4)** The Government should **allow cross-border flow of data**. Data localisation should be limited only to clearly and narrowly defined critical data. Cross-border data flows add to the economy growth. A McKinsey paper from 2016 estimates that global data flows contributed US\$ 2. 8 trillion to the global GDP; **(5)** The new legal framework should be finalized only after **extensive public consultation**. This will ensure that the protection of the rights of Indian citizens is the cornerstone on which this new legal framework is built. It has been close to 10 years since the (Justice) A P Shah Committee Report on privacy, 5 years since the Puttaswamy Judgment and 4 years since the Justice B N Srikrishna Committee's Report. All of this signals an urgency for a data protection law and surveillance reforms.

8. The Draft Drugs, Medical Devices and Cosmetics Bill, 2022

News: The Ministry of Health and Family Welfare has released the Draft Drugs, Medical Devices and Cosmetics Bill, 2022. It seeks to replace the Drugs and Cosmetics Act, 1940.

What are the key provisions of the Draft Bill? - **(1)** The Bill proposes **new definitions** for clinical trials, new drugs, over-the-counter drugs, manufacturers, medical devices, diagnostic equipment, imported spurious drugs, bioavailability studies, investigational new drugs among others. The 1940 Act has medical devices as one of four categories of 'drugs'; **(2)** It seeks to introduce **regulation for online pharmacies and medical devices**. The Bill suggests that the Union

government should formulate rules to regulate online pharmacies; **(3)** It proposes to **empower the Drugs Control Officer** with prior approval of the controlling authority to enter any premises related to clinical trials to inspect the facilities, records, data, documents, books and drugs; **(4)** It proposes **stringent penalties** such as imprisonment and compensation in case of injury or death during clinical trials for drugs. It lays the onus of providing medical management for any injury arising due to the trial on the investigators; **(5)** **Drugs Technical Advisory Board** and **Medical Devices Technical Advisory Board** have been planned to submit recommendations to the Govt. on

The Drugs and Cosmetics Act, 1940

- The Act established regulatory control over the **import, manufacture, distribution, and sale of drugs and cosmetics** in India.
- It made the **sale of substandard drugs a punishable offence**.
- It established the **Central Drugs Standard Control Organization (CDSCO)** for discharging functions assigned under the Drugs and Cosmetics Act.
- The **State Health department** has to **regulate the manufacturing, sales, and distribution of drugs**. Drug Inspectors control the implementation at ground level.
- If the drugs are found to be **substandard**, then the drugs can be recalled from the market and the manufacturer has to conduct a root cause analysis for the faulted reason.
- The Act has provisions to **compensate the victims of adulteration**. It calls for the penalty to be extracted from a convicted manufacturer and given to families of the victims.

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PT BOX

Substandard, Adulterated, Spurious Drugs

Substandard: When a drug doesn't contain ingredients mentioned on the cover, it is considered substandard. The medicine might have less than 90-95% of the active ingredient claimed on the label; or might contain impurities etc.

Adulterated: It is a drug that contains a poison or noxious matter.

Spurious: It is a drug that pretends to be a genuine drug but has no active ingredient in it.

policy matters; (6) It proposes to allow the Union government to **waive the requirement of conducting clinical investigations** for the manufacture or import of a new medical device in public interest.

What is the significance of the Draft Bill? – (1) The existing law is more than 80 years old. A lot of changes have taken place in the medical field and requires new legislation; (2) A separate Medical Devices Technical Advisory Board (MDTAB) will help in **catering to the specific and varied needs of the medical device** sector vis-a-vis drugs; (3) **Online pharmacies are currently working completely outside the law**. In case of a violation, drug inspectors are unaware of the provisions of the law or Rule under which they can proceed against the online pharmacies. Jurisdiction of Drug Inspectors is limited to their State, so they can't take action on any online pharmacy which is licensed in another State; (4) The Bill prohibits clinical trials or clinical investigations of drugs and medical devices **without permission from the central licensing authority**. While companies have to seek permission from the regulator to conduct trials even now, this is not specifically mentioned in the existing law; (5) The existing Clinical Trial Rules have fines, but a fine of few lakh rupees is not enough to deter a big pharma company. However, the **provisions for imprisonment under the draft Bill might act as a deterrent**.

What are the shortcomings of the Draft Bill? – (1) Industry's aspirations for a **separate act for medical devices has not been addressed**.

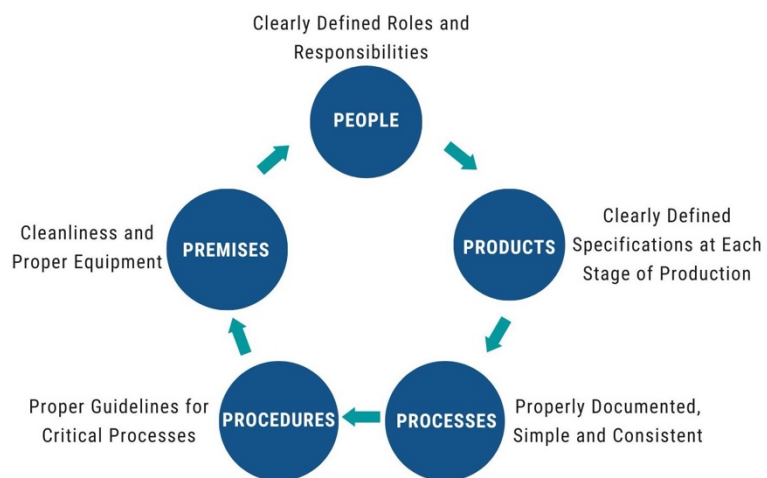
Experts say the joint law is more complex; (2) The draft Bill **completely misses post-marketing surveillance**, especially for medical devices, because implants can remain within a patient's body for years. There should also be provisions for recalling medicines or devices if any issues are detected; (3) The draft Bill defines penal provisions for 'adulterated' or 'spurious' medical devices (rusty, corroded). Many experts believe that devices are engineering products that can't be adulterated. Treating a rusty part of a medical device as adulterated and a criminal offence is absurd; (4) The new Bill **does not provide for the enforcement of provisions of good manufacturing practices (GMPs)**. GMPs are necessary to ensure quality of the pharmaceuticals. The Bill envisages no criminal penalties for failure to comply with GMPs. At most, licenses may be cancelled, but since inspection reports are never published, citizens have no idea if

Good Manufacturing Practices (GMPs)

- According to the WHO, Good Manufacturing Practice (GMP) is a **system for ensuring that products are consistently produced and controlled according to quality standards**. It is designed to **minimize the risks** involved in any pharmaceutical production that cannot be eliminated through testing the final product.
- Risks:** The main risks are:
 - Unexpected contamination of products, causing damage to health or death;
 - Incorrect labels on containers, which could mean that patients receive the wrong medicine;
 - Insufficient or too much active ingredient, resulting in ineffective treatment or adverse effects.
- Scope:** GMP covers all aspects of production; from the starting materials, premises and equipment to the training and personal hygiene of staff.
- Impacts:** GMPs ensure several benefits
 - Prevent unintended therapeutic effects.
 - Poor quality medicines are health hazards. GMPs avoid these hazards and save money.
 - Boost exports as most countries accept import and sale of only those medicines that have been manufactured to internationally recognized GMPs.

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5Ps of GMPs



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drug inspectors are conducting GMP compliance-related inspections; **(5) India has 37 agencies along with the Central Drugs Standard Control Organization (CDSCO)**, for enforcing drug regulation across the country. The Bill **does not address the need for a single regulator**. Critics argue that States such as Himachal Pradesh, which account for a bulk of pharmaceutical manufacturing on account of tax benefits for the industry, do a poor job in enforcing the Drugs and Cosmetics Act. The **fear of scaring away investments by the pharmaceutical industry likely plays a key role in the State's decision to not enforce the law**. Drugs manufactured in Himachal Pradesh are sold across the country and even States with relatively more competent drug regulators can do little to stop the flood of these substandard drugs.

What should be the approach? – (1) The Mashelkar Committee in 2003 had recommended centralizing drug licensing with the **central regulator**. This should be created for improving efficiency as witnessed in the U.S which has a single regulator; **(2) The Bill** should have provisions for proactive **disclosures related to critical documentation associated with regulatory decisions** like disclosure of data related to new drug approval (including clinical trial data), GMP compliance data etc.; **(3) Public hearings or citizen's petitions** should be allowed to enable citizens to participate in the regulatory process and register their objections.

The Drugs, Medical Devices and Cosmetics Bill has some promising provisions but leaves critical gaps that must be addressed. The Government can bring suitable amendments to make the law more holistic and inclusive. A robust regulatory arrangement will further enhance the global standing of India's pharmaceutical industry.

9. School Health Services

News: With the return of normal times after pandemic, there is a need to revamp the health services provided in the schools.

What are the past efforts toward School Health Services (SHS)? – (1) The first documented record of school health services in India is from 1909. Then presidency of Baroda began the medical examination of schoolchildren; **(2)** In 1953, the Secondary Education Committee recommended comprehensive policy interventions dealing with school health and school feeding programs. However, most interventions **focused on nutrition instead of comprehensive school health**; **(3)** In March 2022, the Government of Delhi began 20 school health clinics. It was based on the multi-stakeholder partnership, i.e., funded through a corporate social responsibility fund and run with collaboration between health and education departments. This Delhi initiative also suffered from the same issue, i.e., lack of knowledge on what makes comprehensive school health services.

What are the constituents of comprehensive School Health Services (SHS)? – (1) Healthcare needs are often equated with medical care needs; **(2)** School children have limited medical care needs. However, there are many healthcare needs such as unhealthy dietary habits, irregular sleep, lack of physical activity, mental, dental, and eye problems, sexual behaviour, the use of tobacco and other substances, addiction, etc.; **(3)** Proper knowledge and lifestyle adopted at the young age lays the

School Health Services (SHS)

• FRESH Framework (UNESCO, UNICEF, WHO)

◦ Core Areas

- Focus on school health policies, i.e., water, sanitation, and the environment, Skills-based health education, School-based health, School-based nutrition.

◦ Supporting Strategies

- Effective partnerships between the education and health sectors, Community partnership, Student participation.

• Guidelines by the Centre for Disease Control and Prevention, US

◦ Main Focus Areas

- Acute and emergency care, Family engagement, Chronic disease management and care coordination.

• WHO Guidelines

◦ School Health Services should be designed based on **local need assessment**

- Health promotion, Health education, Screening leading to care and/or referral and support.

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foundations of healthy behaviour for the rest of life e.g., scientific evidence shows that tobacco cessation efforts are far more successful if started in school; **(4) FRESH Framework:** UNESCO, UNICEF, the World Health Organization (WHO) and the World Bank have published the **FRESH** Framework (Focusing Resources on Effective School Health). It proposes four core areas and three supporting strategies; **(5)** The Centre for Disease Control and Prevention, US has also provided guidelines on School Health Services.

What should be the approach? – (1) States should **draw up a road map** to revamp and strengthen school health services, with a timeline and dedicated budgetary allocation; **(2)** Build upon the existing school health infrastructure. **Health talks** should be a part of teaching. **Adolescent sexual health** such as menstrual hygiene, etc. should be integrated into regular classroom teaching; **(3)** School health clinics should be supplemented with online consultations for physical and mental health needs; **(4)** The **participation and role of parents** (parent-teacher meetings) should be increased; **(5)** Government's school health services initiatives should take care of both private schools and government-run schools; **(6)** The School Health initiative under the Ayushman Bharat program must be revamped; **(7)** A convergence of the National Health Policy, 2017 and National Education Policy, 2020 may result in the provision of comprehensive school health services in every Indian State.

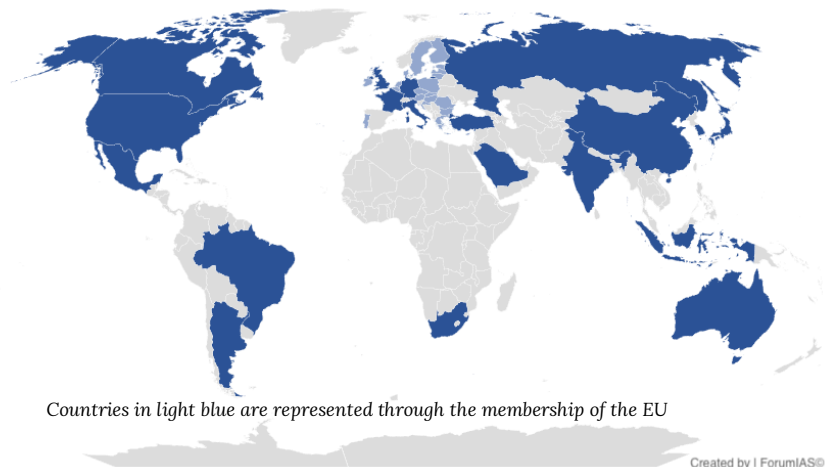
10. Relevance of G20

News: The G20 has played an important role in shaping and strengthening global architecture and governance in all major international issues. However, the changing geopolitical scenario has thrown new challenges. G20 must find innovative solutions to these challenges to stay relevant. India, with its up-coming Presidency, can play a vital role in re-shaping the G20.

What is G20 and its background? – (1) Members:

The Group of 20 (G20) comprises Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, United Kingdom, and the United States along with the European Union. Spain is a permanent invitee, as are several international agencies like the UN, the IMF, ASEAN, the African Union, etc.;

(2) Economic Status: G20 members currently account for ~80% of world GDP, 75% of global trade, and 60% of the global population; **(3) Origins:** G20 was **founded in 1999** after the Asian financial crisis as a forum for the Finance Ministers and Central Bank Governors to discuss global economic and financial issues. It was later upgraded to the level of Heads of Government and was designated the 'premier forum for international economic cooperation'. Since 2011, the G20 Summit has been held annually, under the leadership of a rotating Presidency; **(4) Scope:** The G20 initially focused largely on broad macroeconomic policy, but it has since expanded its ambit to include **trade, climate change, sustainable development, energy, environment, climate change, anti-corruption** etc.



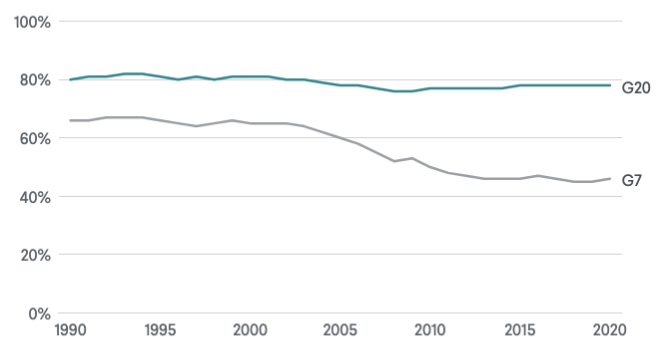
What is the organizational structure of G20? – (1) The G20 does not have a charter or a secretariat. The Presidency, aided by the countries holding the Presidency before and after it (**Troika**), is responsible for setting the agenda of each year's Summit. **At present, the Troika is made up of Italy (2021), Indonesia (2022) and India (2023);** (2) The G20 process is led by **the Sherpas of member countries**, who are personal emissaries of the Leaders. The Sherpas oversee negotiations over the course of the year, discussing agenda items for the Summit and coordinating the substantive work of the G20.

The G20's work is divided into two tracks: the **Finance Track** and the **Sherpa Track**. Within the two tracks, there are working groups in which representatives from the relevant ministries of the members as well as from invited/guest countries and various international organizations participate.

What is the significance of G20? – (1) It is a **more representative grouping** in comparison to groups like G7 (only industrialized nations) which ignored the interests of the global south. Moreover, while the share of G7 countries in the global economy has been falling, G20's share has been largely consistent; (2) It has played a major role in **tackling financial crises effecting global economy** e.g., in the 2007 financial crisis, G20 members took concerted actions, including boosting spending and lowering trade barriers, to revive economies; (3) The economic and financial clout of G20 provides **a dominant say to the grouping in critical international matters** like world trade, climate change, data decentralization etc.; (4) It also played a pivotal role in providing relief to countries during **the COVID-19** pandemic. The G20 countries agreed to suspend debt payments owed to them by some of the world's poorest countries, providing billions of dollars in relief. Further in October 2021, G20 leaders pledged to help vaccinate 70% of the world's population by mid-2022.

The G20's Share of the Global Economy

Share of global gross domestic product (GDP)

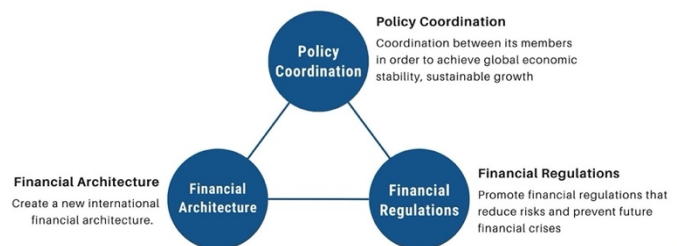


Note: Countries that are G20 members through the EU are excluded.

Source: World Bank.

What are the challenges surrounding G20? – (1) **Russia-Ukraine Crisis:** The U.S and its allies are not willing to sit on the same table with Russia and its allies. This may cause a severe stalemate in the grouping's functioning; (2) **Rising Protectionism:** Globalization is retracting, and multilateral organizations have a credibility crisis. Countries around the world are choosing to be '**G-zero**' over the G7, G20, BRICS, P5 etc. '**G-zero**' is a term coined by political commentator Ian Bremmer to denote **Every Nation for Itself**. The current US administration under President Biden has agreed to reverse various decisions of the Trump administration on climate change and migration but not on tariff policy. They have so far kept most of earlier tariffs in place; (3) **Informal structure of G20:** It has no permanent secretariat. The agenda changes every year according to the priorities of the presiding nation; (4) **Influences decision-making of smaller countries:** The smaller countries, which are not a member of the G20 grouping, have to implement the declarations and commitments agreed by G20 nations for their growth and opportunity (like the G20 nations agreed to end international financing for coal power plants; (5) **Resolution of Issues:** The G20 grouping is not able to solve the issues within its member

Objectives of G20



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nations like the US-China issue on trade, the US-Russia divide on nuclear weapons, etc.; **(6) No Enforcement mechanism:** The G20's toolkit ranges from simple exchanges of information and best practices to agree on common, measurable targets. None of this is achieved without consensus, nor is it enforceable, except for the incentive of peer review and public accountability. Further, the **G20 declarations are not legally binding**; **(7) Under-representation of Africa:** South Africa is the sole member from Africa.

What should be a new global vision for G20? – (1) Basic Human Necessities: G20 should build on the global consensus in the Vienna Declaration on Human Rights 1993. Ensuring adequate food, housing, education, health, water, sanitation and work for all should guide international cooperation; **(2) Public health** should be made a key agenda especially after the deadly impact of COVID-19. A major global challenge is the rapidly growing antimicrobial resistance (AMR) which needs new antibiotics and collaboration between existing biotechnology facilities; **(3) G20 should also focus on the space sector** for finding solutions to problems of natural resource management ranging from climate change-related natural disasters, supporting agricultural innovation to urban and infrastructure planning; **(4) A Global Financial Transaction Tax**, considered by the G20 in 2011, needs to be revived to be paid to a Green Technology Fund for Least Developed Countries.

What should be the approach going ahead? – (1) Bridging powers between the East and West: Ukraine war and sanctions on Russia have disrupted economic system. Countries like India and South Africa can act as bridging powers between East and the West; **(2) Formalization of G20:** The G20 has to include objectives, vision and mission statements, a permanent secretariat, and staff to oversee commitments and ensure continuity in the agenda; **(3) Focus more on domestic commitments:** The G20, instead of international commitments, can focus on domestic commitments and start implementing them e.g., instead of ending international financing for coal power, the G20 Nations should phase out domestic coal consumption; **(4) More Representative:** A 2011 report had criticized the G20's exclusivity, so the G20 has to make itself more representative especially from Africa.

India will assume the Presidency of the G20 in December 2022 and will have to bear the burden of ensuring the G20's continued existence in a globally polarized world through 2023. The challenge before India will be to protect the idea of the G20 and keeping it away from fragmentation in the face of geopolitical fissures.

11. International North South Transport Corridor (INSTC)

News: The INSTC has been launched with the arrival of two 40-foot cargo containers from Russia's Astrakhan Port at the Nhava Shiva port in Mumbai.

What is INSTC? – (1) It is a 7,200-km multi-modal transport corridor that combines **road, rail and maritime routes connecting Russia and India via Central Asia and Iran**. The corridor is expected to consolidate the emerging Eurasian Free Trade Area; **(2)** The legal framework for the INSTC is provided by a trilateral agreement signed by India, Iran and Russia at the Euro-Asian Conference on Transport in 2000; **(3)** It includes 13 countries namely India, Iran, Russia, Turkey, Armenia, Azerbaijan, Belarus, Kazakhstan, the Kyrgyz Republic, Tajikistan, Oman, Syria, and Ukraine.

What is the significance of INSTC? – (1) Economical: The INSTC is expected to **reduce freight costs** by 30% and the **journey time** by 40% in comparison to the conventional deep-sea route via the Suez Canal; **(2) Alternate Route:** A container ship stuck in the Suez in 2021 had halted the maritime traffic between the Mediterranean Sea and the Red Sea. INSTC provides an alternate route reducing such risks; **(3) Increase in**

Bilateral Trade: The improved transport connectivity will increase bilateral trade volumes between Russia, Central Asia, Iran, and India. India can now **bypass Pakistan to access Afghanistan, central Asia** and beyond; (4) A special economic zone around Chabahar will **offer Indian companies the opportunity to set up a range of industries**; for example, NALCO proposes to set up an aluminium smelter; (5) INSTC can help secure India's interest in Central Asia and counter China's Belt and Road Initiative (BRI).



The traditional trade route (Blue) between Western Russia and India runs through Baltic Sea, North Sea, Atlantic Ocean, Mediterranean Sea, Suez Canal, Red Sea and Arabian Sea. INSTC (Red) is multi-modal trade route and cut shorts the journey. significantly.

What does India's engagement in INSTC and QUAD signify? – (1) India's founding role in both the INSTC and the QUAD exemplifies

its **departure from non-alignment to multi-alignment**; (2) The INSTC offers a platform for India to closely collaborate with Russia, Iran and Central Asian republics. INSTC's major players Russia and Iran are subject to sanctions by Western governments; (3) On the other hand, Quad members of the U.S., Japan and Australia aim to create and safeguard a free and open Indo-Pacific.

Overall, the INSTC is a laudable initiative as a transcontinental multi-modal corridor that aims to bring Eurasia closer together. Further, India's membership in INSTC consolidates India's multi-alignment strategy.

12. India's Engagement with Vietnam

News: India has been gradually enhancing its ties with Vietnam. India recently signed Joint Vision Statement on India-Vietnam Defense Partnership towards 2030.

How has India's engagement with Vietnam evolved? – (1) India and Vietnam signed a formal declaration of strategic partnership in 2007; (2) The relationship was elevated to Comprehensive Strategic Partnership, in 2016; (3) In 2022, India and Vietnam signed a 'Joint Vision for Defence Cooperation' and a memorandum of understanding on mutual logistics support; (4) India has announced finalization of US\$ 500 million Defence Line of Credit. India already has a US\$ 100 million Defence Line of Credit to Vietnam; (5) India has also agreed to expand military training and assist the Vietnam Navy's strike capabilities; (6) India's Defence Minister handed over 12 high-speed boats, a Khukri-class corvette, to Vietnam in June 2022; (7) India and Vietnam are also engaged in: (a) Maritime security dialogue; (b) Joint naval exercises; (c) Coast Guard cooperation, and training and capacity building; (d) Cooperation in the Indo-Pacific region; (8) Both Indian and Vietnam are synergizing their efforts to work in **bilateral and other sub-regional frameworks**, such as IORA, BIMSTEC, Mekong-Ganga Cooperation, etc. Both countries are also looking at collaboration around the seven pillars of the **Indo-Pacific Oceans Initiative (IPOI)**.

What is the significance of India-Vietnam relationship? – (1) As India pursues its ‘**Act East Policy**’, Vietnam has become a valuable partner in India’s political and security engagements in the Indo-Pacific region; (2) Both nations share **strategic concerns** like energy security and open and secure sea lines of communication (SLOCs); (3) India’s is broadening its **economic and strategic interests** in the region, while Vietnam’s desire for strategic autonomy. Both will be benefitted by the strong relationship. Vietnam is of great strategic importance because its **position enables it to control the South China Sea**.

What are the reasons behind growing maritime engagement with Vietnam? – India’s external trade (over 90% by volume and 70% by value) is by sea, thus oceans are the key to India’s economic security. India has intensified its efforts to engage with maritime nations, including Vietnam: (1) To counter an **assertive China** by strengthening Vietnam’s military power; (2) Recognising **geostrategic and geo-economic importance** of sea lines of communication beyond its geographical proximity like the South China Sea. It is important as almost 55% of India’s trade with the Indo-Pacific region passes through the South China Sea; (3) To track potential developments in the **maritime domain** that could affect India’s national interests; (4) Importance of a **forward maritime presence and naval partnership** to deter potential adversaries, has been recognised by the Indian Navy.

IPOI presents immense opportunities for India-Vietnam relations. It will be helpful in addressing common challenges and strengthening India- Vietnam relationship. India-Vietnam should now work on extending cooperation in blue economy, marine habitat conservation and cultural collaborations etc.

13. China-Taiwan Crisis

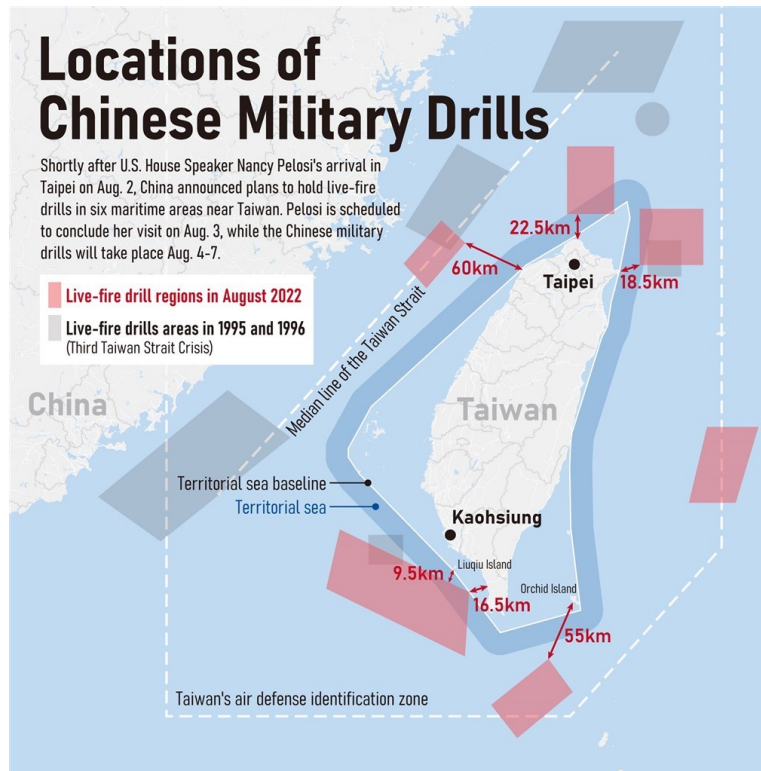
News: The tensions between the US and China are at their worst in the recent times over the visit of the Speaker of the House of Representatives (US) to Taiwan. China has responded by undertaking aggressive military drills in the Taiwan Strait. If the crisis worsens, it will have profound geopolitical implications.

What is the China-Taiwan Dispute? – (1) The Taiwan dispute has roots in the early decades of the 20th century. After the collapse of the Qing dynasty, China was declared a republic in 1911; (2) A bitter power struggle ensued between the nationalist Kuomintang (KMT) and the Communist Party of China (CPC); (3) The struggle continued till 1949, when the Communists under Mao Zedong won the civil war; (4) The leaders of KMT fled to the island of Taiwan, established **Republic of China (ROC)** Government and moved their capital from Nanjing to Taipei; (5) The Communist Party took over mainland China and established the **People’s Republic of China (PRC)** Government. Taiwan was a Japanese Colony from 1895 to 1945; (6) The Communist Party of China (CPC) views Taiwan as a renegade province and aims to unify it with Mainland China. Taiwan argues that it was never a part of the modern Chinese State (PRC); (7) Since then relationship has seen many ups and down. They had come close to a military conflict in 1995-96. Taiwan’s President was steering its foreign policy away from the ‘**One-China**’ theory to a ‘**State-to-State**’ principle that meant China and Taiwan ought to engage as two separate States; (8) The relationship has soured since 2016. The main reasons are **more aggressive nationalism under China’s Xi Jinping** and the **firm stance of Taiwan’s Tsai Ing-wen (President) regarding independence from China**. The relationship is at a new ebb with the Speaker’s visit and given rise to the current China-Taiwan crisis.

What has been the stand of the US? – From 1949 to 1979, the **US had recognised Taiwan (ROC) as China**. However, when the US established ties with the Communist Party and the PRC, it recognised PRC as the ‘sole legal Government of China’ and **de-recognised Taiwan (ROC)**. However, the US continues to maintain unofficial relationship with the ROC and doesn’t recognize PRC’s sovereignty over Taiwan. The US ‘One China Policy’ is based on strategic ambiguity.

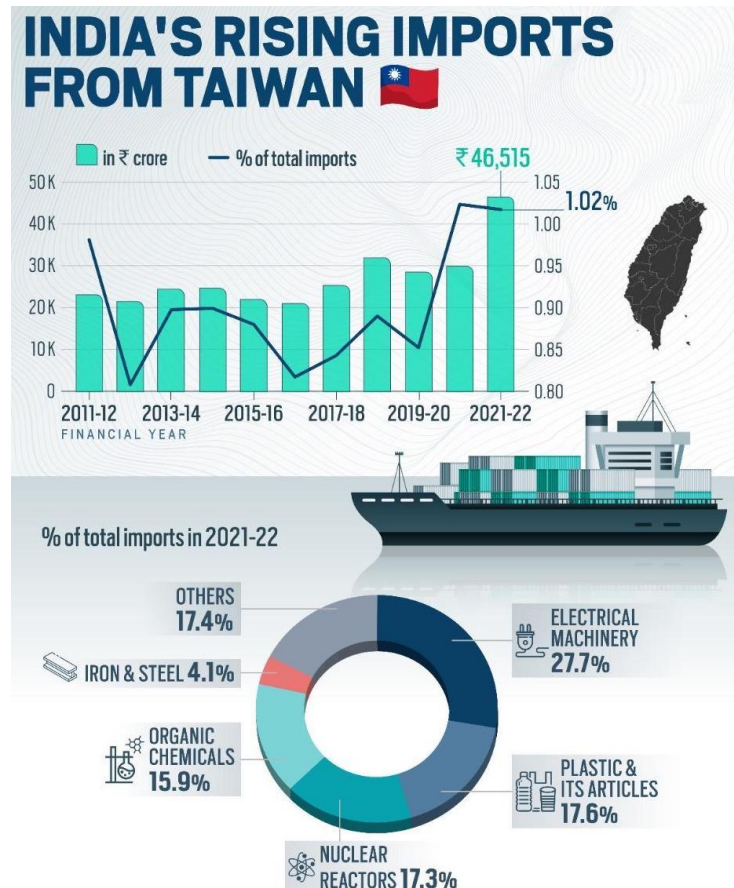
As of 2022, only 15 countries recognise the ROC. Even international inter-governmental bodies like the United Nations and the World Trade Organization don't officially recognise the ROC.

What are the reasons behind current China-Taiwan Crisis? – (1) Top leaders of Taiwan and China have shown a **contradictory stance** over their relationship. **Taiwan's View:** It will not accept the China's use of 'one country, two systems' to downgrade Taiwan and undermine the cross-strait status quo. **China's View:** Resolving the Taiwan question and realizing China's complete reunification is a historic mission. China calls for resolute action to utterly defeat any attempt towards Taiwan's independence; **(2)** Taiwanese have a democratically elected government, and greater prosperity and political rights, so they **strongly oppose reunification**. A Chinese law from 2005 warns of military action in case of secession; **(3) Taiwan's legal status is a grey area**, despite China's rising global clout. 15 nations official recognise Taiwan. This challenges the notion of 'One-China Policy' and China fears that more nations will give recognition to Taiwan in future; **(4) Taiwan-U.S. closeness** is deteriorating China's relationship with Taiwan. While the US has long maintained strategic ambiguity, the previous US administration (under President Trump) broke with this diplomatic policy by engaging more directly with Taiwan.



What is the status of India-Taiwan Relationship? – (1) India **does not have formal diplomatic ties with Taiwan**, as it follows the **One-China policy**. However, India hasn't mentioned the 'One China' Policy in official communications/statements since 2010. In fact, the ambassador of Taiwan was invited to the Official inauguration of the Government of India after the 2014 General Elections; **(2)** India has an office in Taipei for diplomatic functions: **India-Taipei Association (ITA)** is headed by a senior diplomat. Taiwan has the **Taipei Economic and Cultural Centre (TECC)** in New Delhi. Both were established in 1995; **(3)** India-Taiwan ties focus on commerce, culture and education. Although the relationship is in its third decade, the ties have been kept low-profile deliberately, owing to China's sensitivities e.g., Parliamentary delegation visits and legislature-level dialogues have stopped since 2017, around the time the India-China border standoff happened in Doklam; **(4)** More recently, India has tried to play up its relationship with Taiwan, as its ties with China have been strained. The present Taiwanese Government is keen on expanding areas of cooperation with India as it is one of the priority countries for Taiwan's New Southbound Policy. Till now, the relationship had largely been an economic and people-to-people relationship. However, amid rising tension with China, India and Taiwan are paying attention to bolster their ties.

What are the implications of China-Taiwan Crisis? – (1) Taiwan is the world's leading chipmaker, and home to **Taiwan Semiconductor Manufacturing Corporation (TSMC)**. TSMC holds 90% market for advanced chips that power computers and phones. Disruption in the exports of chips will lead to **global shortage of electronic goods** and appliances, automobiles and other manufacturing industries dependent upon semiconductor chips; (2) It will lead to **militarization of the region**. China has started its military operations against Taiwan while the U.S stationed 4 warships close to the East of Taiwan. The intensification of the situation may invite more players to the conflict and fuel more militarization; (3) Any extreme military action and forced annexation attempt might result in a **Russia-Ukraine-like conflict**. This will be detrimental for the global economy, which is already facing **fears of recession** amid the war in East Europe; (4) India's trade with Taiwan has risen rapidly in the last decade. India imports iron and Steel, electrical machinery, electronics and chemicals among other things from Taiwan. Disruption in the India-Taiwan trade and a global recession will further add to domestic inflation and slowdown economic growth.



What lies ahead? – (1) China can intensify its attacks on and around Taiwan's territory. It will only worsen the China-Taiwan Crisis. Exports of some limited items from Taiwan has also been banned by China. There have been encroachments into Taiwan's Air Defence Identification Zone; (2) The western countries may impose sanctions on China if it continues its intrusion in Taiwan's territory. It is doubtful if China can withstand economic sanctions at this stage as it already needs to stabilize its rapidly nosediving economy; (3) India should try its best to be part of all attempts to scale down the crisis situation without getting drawn into the vortex of the flashpoint; (4) Greater economic partnership with Taiwan should be followed up by **encouraging the domestic manufacturing sector**, removing all impediments, liberalizing tax laws and strengthening the supply chain mechanism; (5) Some foreign policy experts argue that **India must be more forthright in its criticism of Chinese aggression** on India's borders. A small nation like Taiwan has withstood immense Chinese pressure. India on the other hand, continues to downplay border stand-off with China domestically as well as at international fora. The fear of disruption in economic ties may be unfounded, as China is stand to lose more than India if trade ties are cut-off; (6) India should also **focus on finding alternate destinations** of critical import/export items that are traded with Taiwan as escalation of conflict can choke the supply. Amongst them, the most critical item is semiconductor chips.

General Studies Paper III

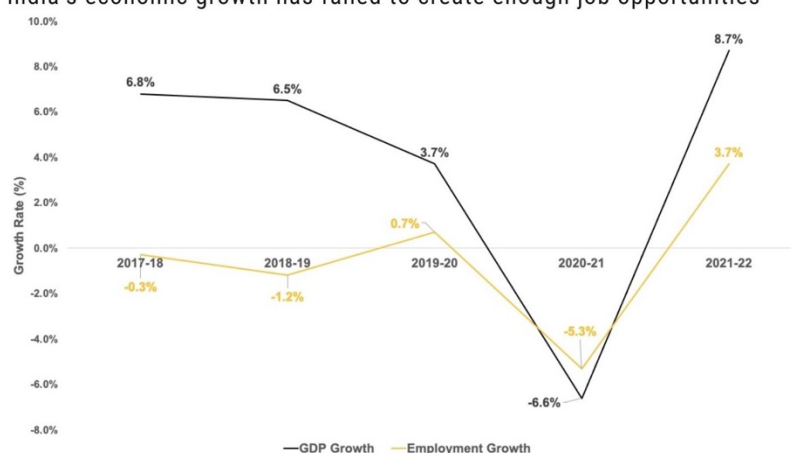
1. The Issue of Jobless Growth in India

News: India is one of the fastest growing economies in the world. However, the growth hasn't translated into creation of more employment opportunities. Economists have been raising concerns regarding the jobless growth. It can have significant negative outcomes if not addressed.

What has been the trend with respect to Unemployment? – (1) The unemployment rate in India has been hovering around 7% or 8%, up from about 5% five years ago, according to the Centre for Monitoring Indian Economy (CMIE); (2) The workforce shrank as millions of people were pushed out of the job market due to weak economic prospects since the outbreak of pandemic; (3) The **labour force participation rate has dropped** to just 40% from 46% six years ago, according to the CMIE. By comparison, the participation rate in the US was 62.2% in June 2022; (4) According to the World Bank, between 2010 and 2020, the female labour force participation (FLFPR) in India dropped to 19% from 26%. According to CMIE, the **FLFPR plummeted to 9%** for January-April 2022 period; (5) The rate of **unemployment in the 20-24 age group was 43.7%** in June 2022.

Jobless Growth

India's economic growth has failed to create enough job opportunities



Source: CMIE, Bloomberg

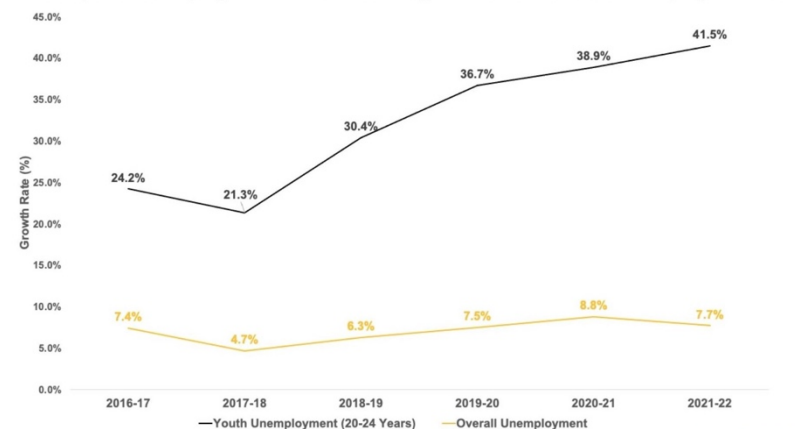
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What are the reasons behind India's Jobless Growth? – (1) **Lack of Structural Transformation:** India has failed to create enough jobs in the manufacturing and services sector. According to CMIE, the manufacturing sector employed 51 million Indians in 2016-17, which had come down to 27.6 million in 2020-21. Manufacturing sector in India has been **capital intensive rather than employment intensive**; India has not witnessed an export boom of low-skill, labour-intensive products, in contrast to textile sector in Bangladesh. (2) **Poor quality of jobs:** India's **economic growth has largely been services-led** which hasn't created many jobs. Most jobs in the service sector are in petty retailing, small eateries, domestic help, sanitation, security staffing, transport etc. and do not provide reasonable pay and social security benefits; (3) **Poor Education and Skills:** Graduates have limited skills and are not valued by the employers. Employers have said that less than 50% of the college graduates have requisite skills; (4) The government has made efforts to generate jobs but these are hindered by legacy issues of poor infrastructure, low public expenditure on education, issues in pedagogy etc. complex and variable rules, skill deficiencies, hidden costs and more; (5) **Employment Elasticity:** India's employment elasticity of growth is on decline. It is a measure of how expansion in output generates jobs. A 10% growth in gross domestic product is associated with only a 1% rise in employment; (6) Many women are opting for **unpaid work at home**, taking care of elderly relatives and kids. In most Indian families, **care work** is the exclusive responsibility of the female members; (7) **Impact of Technology:** Enhanced adoption of new technologies like AI, Automation etc. is decreasing the demand for manpower.

Why is Jobless Growth a cause for concern? – (1) India has the advantage of young demography with ~50% population under 30; but this advantage is fleeting. A significant number of jobs are needed to reap the **demographic dividend**. The rate of unemployment among the youth (20-24 years) is much higher than the overall unemployment rate; (2) To sustain **economic growth** and attract **global investments**, India needs to ensure there's a trained workforce for the industry; (3) In the absence of meaningful livelihood opportunities and rising inequalities, the society will be susceptible to **social unrest**. This was evident by the protests that erupted in June over the **Agnipath Scheme**; (4) Poor people have little to **no savings** which makes it very difficult for them to survive **external shocks** like the COVID-19 pandemic. In the absence of stable jobs, they would lack access to food, clothing and other basic things, endangering their **right to a dignified life**.

Youth Unemployment (20-24 Years)

India's youth unemployment rate is much higher than the overall unemployment rate



Source: CMIE, Bloomberg

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What steps have been taken to improve the situation? – (1) The Union Government has announced plans to **hire a million people** by the end of 2023 to fill vacancies in government departments; (2) **National Education Policy, 2020**: The aim of the policy is to reform the education sector for creating holistic and well-rounded individuals **equipped with the key 21st century skills**; (3) **Sector Skill Councils** have been set-up to address skill shortage in various sectors of economy and bring **convergence between demand and supply of skills**. Industrial Training Institutes (ITIs), polytechnics and other skill-oriented institutions were brought on a common platform to improve quality.

What steps are required to address Jobless Growth? – (1) The **private sector should be given greater support** especially the budding start-ups which can cumulatively generate a large number of jobs. Effective implementation of current schemes like MUDRA, Startup India etc. is needed; (2) The **commercial dispute redressal mechanisms** need to be strengthened in order to attract more investment into the industrial sector. Currently India has 163rd rank in enforcing contracts as per Ease of Doing Business reports; (3) A more focused approach is necessary with respect to skilling and educating the youth according to the demand of the 21st century. They should be encouraged to learn **new age skills** like 5G technology, Big Data, Digital Marketing etc. that would enhance their employability; (4) The government should focus on **boosting the social security net**. This includes enhancing working days under MGNREGA, an **urban job guarantee scheme** like MGNREGA, **Universal Basic Income** etc.; (5) Focus should be placed on **tackling the inefficiencies of governance which includes corruption, red-tapism etc.** This will ensure optimum utilization of resources and ensure creation of more jobs with **minimum barriers to growth**. Further, it should **avoid ill-thought out reforms** and policies to maintain **policy certainty**; (6) The educational institutions must focus on **inculcating an entrepreneurial mindset** in the students. This will ensure that students become job givers rather than job seekers thereby helping to solve the unemployment crisis in the long-term; (7) The local governments and community organisations like **women self-help groups** and youth organisations should be fully involved in the skilling plan for a local area.

Jobless growth remains the single biggest challenge to Indian economy. There is a need to boost manufacturing by creating infrastructure, removing red tape and reviving investor sentiment.

2. Rise in Contractual Jobs in Government Sector

News: Contractual workers of Chhattisgarh government departments staged a day-long strike in all the 28 districts demanding regularization of service.

What are the types of outsourcing in government works? - Outsourcing has become the dominant mode of working in the government, from highly specialised tasks to the most routine ones. They may be classified into 3 categories; permanent, contractual and daily wagers.

There are two main methods to induct an 'employee' on contract in a government entity; (1) Directly on the payroll of government; (2) Through a labour contractor.

What are the advantages of contractual jobs in government? - (1) It can augment the capacity of the government, particularly those works of the state that cater to provision of various services to people; (2) It creates a viable avenue of employment for India's burgeoning working-age population. (3) The **costs and liabilities** of the government entity are significantly reduced compared to permanent postings.

What are the issues faced by contractual jobs in government? - (1) Non-payment of salaries for extended periods; (2) Lack of social security for the worker's welfare such as provident fund (PF), Employees' State Insurance (ESI), etc; (3) Uneven distribution of work vis-à-vis permanent employees; (4) Overwhelming reliance on contractors has undermined the functioning of government institutions; (5) Endless chain of task-delegation. All these issues adversely affect **the quality of public service** including sanitation, public health and transport etc.

How can the condition of contractual jobs be improved? - Recognise contractual jobs in government and expand their **access to social security**. In line with the vision of social justice enshrined in the constitution, **affirmative actions** should be taken to address the issues associated with contractual jobs. It is time for the government to take some concrete measures for its own 'gig workers'.

3. Cultivation of Pulses in India

News: The Cabinet Committee on Economic Affairs (CCEA) has raised the Union government's limit for purchase of three varieties of lentils to boost food security and cushion farm incomes and food inflation.

What are the reasons for reducing pulse cultivation? - (1) They are mostly **grown in marginal lands** prone to moisture stress; (2) Farmers switch to more high-yielding crops when they have **access to irrigation**; (3) Farmers in the two major pulses-growing states of Maharashtra and Karnataka, have **diverted area under arhar to soyabean and cotton**. Soyabean is trading roughly 50% above its minimum support price (MSP). Also, its yields are similar to *arhar*. Bountiful rains have given an added boost to cotton; (4) The **lack of price certainty** reduces incentives for farmers to cultivate pulses.

What are the benefits of Pulses? - (1) Pulses are a valuable protein source for many Indians whose diets are vegetarian and cereal-based; (2) Pulses harbour bacteria that naturally "fix" atmospheric nitrogen and their extensive root systems keep the soil porous and well-aerated. This enhances soil fertility.

What should be done to increase cultivation of pulses? - Commercialisation of pulses' cultivation through: (1) assured MSP; (2) stable import policy; (3) breeding of varieties that are of shorter duration and amenable to

mechanical harvesting; (4) policies that encourage farmers to grow crops requiring less water and chemical fertilisers.

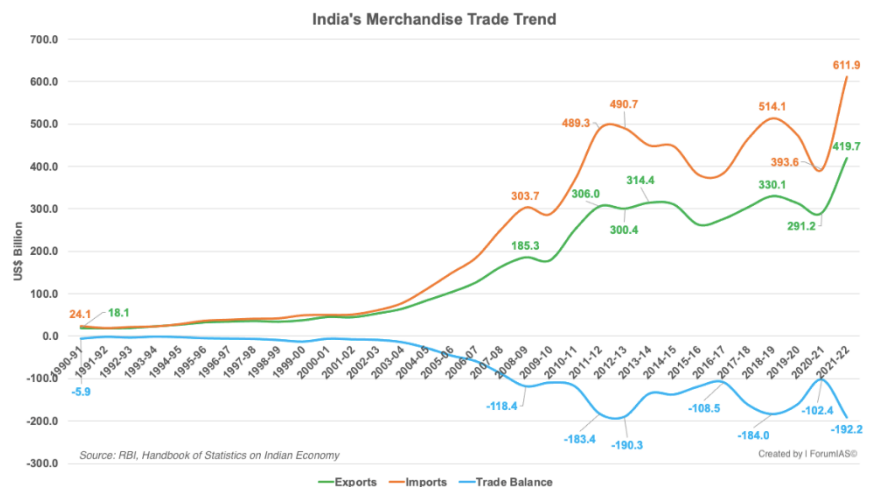
4. Need for a New Foreign Trade Policy

News: The Ministry of Commerce is working on a new trade policy to be unveiled in September 2022. Some experts suggest that the new policy may be rolled out for a period of 2-3 years only to keep pace with fast-evolving scenarios in international trade.

What is a Foreign Trade Policy (FTP)? - An FTP is an elaborate policy guideline and strategy to promote the export of goods and services. It sets out the regulations for cross-border trade. It reveals the Government's position on a host of crucial policy issues like flow of technology, intangibles etc. In India, the Policy has been issued since 1991, usually with a duration of 5 years. The last FTP was notified in 2015, and the new policy was due in April 2020. However, the old policy has been periodically extended in its place.

What is the current status of India's Foreign Trade?

– (1) India achieved highest good exports in 2021-22 at US\$ 419.7 billion. However, there was a significant jump in the imports, which also recorded their highest level ever at US\$ 611.9 billion. The trade deficit stood at US\$ 192.2 billion; (2) The trend has been similar in 2022-23 so far. For Q1 FY2022-23 (April – June 2022), the exports were US\$ 119 billion, imports US\$ 189.8 billion and trade deficit at US\$ 70.8 billion; (3) **India's share in global exports** of goods had fallen to 0.5% in 1990. It has improved in the post-reforms period to touch 0.7% in 2000 and **1.8% in 2021**. (Refer EPIC April 2022 for India's Merchandise Exports: Challenges and Opportunities).



India has run a consistent trade deficit in Merchandise Trade since 1991. The deficit reached highest level in 2021-22 at US\$ 192 billion (18.6% of total trade (Exports + Imports)). However, in % terms, trade deficit was worse in 2008-09 (US\$ 118.4 billion, 24.2% of trade) and 2012-12 (US\$ 190.3 billion, 24.1% of trade).

Why is there need to formulate a new Foreign Trade Policy? – (1) India hasn't been able to truly leverage the potential of Global Value Chains (GVCs) in comparison to China and other East Asian neighbours; (2) The **onset of the pandemic followed by the Russia-Ukraine Crisis** has created opportunities for India to boost its exports in fellow countries. Pandemic has made countries adopt a **China plus one policy** that provides an opportunity to boost Indian exports; (3) A new policy is desired in light of the **altered nature of international trade** in post-pandemic world. (4) A revamped policy is desired to **clarify India's position** vis-a-vis various flagship programmes of the government like '**Local for Global**' and PLI (Production linked

incentive) schemes; (5) India is in the process of concluding **critical Free Trade Agreements (FTAs)** with U.K, Australia and Canada that warrants a revamped policy for leveraging the benefits of FTAs; (6) The surge in **input and fuel costs** are hitting the bottom lines (profits) of **MSMEs**. New FTP can help ease the woes of MSMEs; (6) Various export incentive schemes had to be phased out after they were challenged at the World Trade Organization (WTO) for their trade-distorting effects. New FTP will help in redesigning such schemes as per compliance with the WTO norms; (7) It would **end ad hoc, mistimed, and contradictory changes** to the Foreign Trade Policy, 2015 that adversely impact export-oriented businesses.

PT BOX

Global Value Chains

Multiple components of a product are produced by different companies, often headquartered in developed countries but offshoring production to locations in developing countries based on the competitiveness of that location. The iPhone, for example, has 178 components that are sourced from 200 different suppliers across 26 countries.

India's Foreign Trade Policy 2015-20 (Extended to 2022)

- It provides a **framework for increasing exports of goods and services** as well as generation of employment and increasing value addition in the country, in line with the 'Make in India' programme.
- The Policy aims to enable India to respond to the challenges of the external environment, keeping in mind the rapidly evolving international trading architecture.
- FTP 2015-20 introduces two new schemes, namely -
 - 'Merchandise Exports from India Scheme (MEIS)' for export of specified goods to specified markets.
 - 'Services Exports from India Scheme (SEIS)' for increasing exports of notified services.
- For grant of rewards under MEIS, the countries have been categorized into 3 Groups. The rates of rewards under MEIS range from 2-5%. Under SEIS the selected Services would be rewarded at the rates of 3% and 5%.
- Measures have been adopted to nudge **procurement of capital goods from indigenous manufacturers** under the Export Promotion Capital Goods (EPCG) Scheme by reducing specific export obligation to 75% of the normal export obligation.
- Measures have been taken to give a **boost to exports of defense and hi-tech items**.

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What factors impair the realization of benefits of the FTP? – (1) Inadequate Infrastructure: Lack of proper infrastructure such as ports, warehouses and supply chains increase the average turnaround time for ships in India to about 3 days (world average: 24 hours); **(2) High Tariffs:** Tariff levels in India are much higher than China and other East Asian economies which undermine the integration with global value chains; **(3) Higher Bound Tariffs:** India's bound tariffs are much higher than applied tariffs. The bound tariff is the **maximum tariff level** for a given commodity. (e.g., the bound tariff on import of steel may be 10% but the actual rate applied by India may be 5%). India's trade negotiators tend to view this as an advantage because it gives 'policy space' to raise duties if required. But it also **enhances uncertainty** because investors can no longer be sure whether duties on their inputs will suddenly be raised; **(4) Multilateral Trade Agreements:** Many experts believe that India's decision to **opt out of the Regional Comprehensive Economic Partnership (RCEP)** was a missed opportunity. This would have given better integration with the East and South-East Asia region.

Steps taken to Promote Exports

The Government has taken undertaken several steps to promote the growth of exports.

✓ Foreign Trade Policy

It provides a **framework** for:

- Increasing exports of goods and services.
- Generation of **employment**.
- Increasing **value addition**.
- Keeping in mind the vision of 'Make in India'.

✓ Niryat Bandhu Scheme

- Launched with an objective to **reach out to the potential and new exporters** including MSMEs.
- **Mentor them** through orientation programmes, counseling sessions, etc., on various aspects of foreign trade.

✓ Certification of Origin

It has been launched to facilitate trade and **increase Free Trade Agreement (FTA) utilization** by exporters.

✓ RoDTEP Scheme

- Remission of Duties and Taxes on Export Products Scheme has replaced the earlier MEIS.
- It ensures that the exporters receive the refunds on the previously non-recoverable embedded taxes and duties.
- Mandi tax, VAT, Coal cess, Central Excise duty on fuel etc. will now be refunded under this particular scheme

✓ Districts as Exports Hubs

It is aimed at

- Identifying products with export potential in each district.
- Address bottlenecks for exporting these products.
- Supporting local exporters/manufacturers to generate employment in the district.

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What should the new Foreign Trade Policy contain? – (1) It must revert to the earlier trend of gradually reducing customs duties to levels prevailing in East Asia; **(2)** It must keep access to imports open especially in important areas where technology is changing rapidly (like green energy); **(3)** It must give clarity on the incentives and benefits available for **international e-commerce**; **(4)** India is dependent on imports for a range of products, so the new trade policy should **boost domestic manufacturing** and aim to make it **more competitive**.

What steps should be taken to promote exports? – (1) The Government must invest in **upgrading export infrastructure** such as ports, warehouses, quality testing and certification centres; **(2)** India also needs to **adopt modern trade practices** to save both time and cost. E.g., digitisation of export processes; **(3)** The government must **help MSMEs** to enhance their export potential; **(4)** The **Indo-Pacific Economic Framework (IPEF) agreement** offers a new opportunity. The trade pillar in the IPEF does not, as of now, deal with market access. India should work to push the IPEF towards a trade agreement; **(5)** **Digital trade, e-commerce and digital payments** will play a major role in global integration in the years ahead. India has substantial strengths in this area. India should be actively involved in the development of global rules acceptable to all.

6 Point Agenda to Raise India's Trade Competitiveness

A white paper on 'Building Competitiveness for Inclusive Growth', by CUTS International, Institute for Competitiveness and Institute for Studies in Industrial Development has outlined an action agenda for improving Indian competitiveness

<p>1</p> <p>Investment in Intangible Assets</p> <ul style="list-style-type: none"> Investments in Health, Education and 'future friendly' skill building. State Governments must devise their own strategies. Empower local governments to realize potential of each district. 	<p>2</p> <p>Promote Fair Competition</p> <ul style="list-style-type: none"> Implement National Competition Policy. Create level playing field for all firms. Remove entry barriers. Improve Ease of Doing Business. 	<p>3</p> <p>Enhance Institutional capacity</p> <ul style="list-style-type: none"> Review reports of Reform Commissions. Implement recommendations to enhance capacity of public institutions. Lateral entry should be promoted, including experts for FTA negotiations.
<p>4</p> <p>'Whole Government' Approach</p> <ul style="list-style-type: none"> Close working of Ministries so that policies are synergistic. 'Regulatory Impact Assessment' based on 3 tests (a) Legality; (b) Necessity, (c) Proportionality to ensure efficient governance. 	<p>5</p> <p>Complement FTAs</p> <ul style="list-style-type: none"> Improve intra- and inter-sectoral firm level cooperation/participation. Synergy between PLIs and FTAs so that products become competitive domestically and internationally. Rethink joining of RCEP. 	<p>6</p> <p>Shared Vision</p> <ul style="list-style-type: none"> Adopt mutual vision and single market approach. Implement cooperative federalism in letter and spirit.

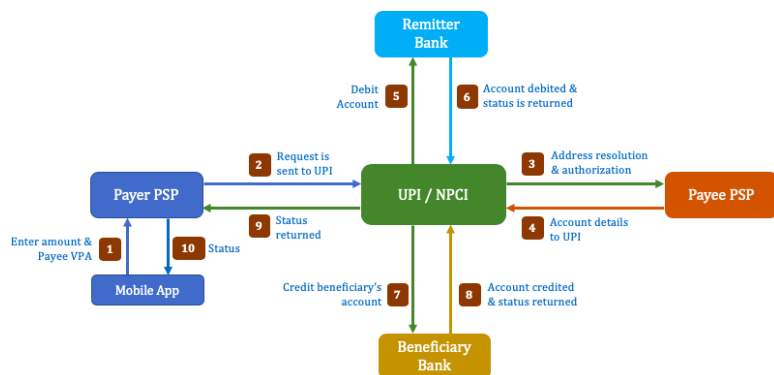
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The new FTP should work in a phased manner to address export constraints. It should **review the regulatory and operational framework** to reduce the transit costs and **create a low-cost operating environment** through developed logistics and utility infrastructure.

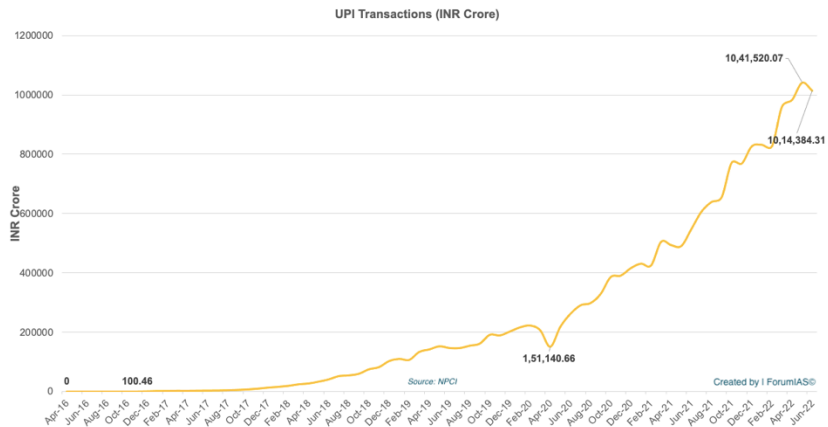
5. Unified Payments Interface (UPI) and Digital Payments in India

News: Government has clarified that there will be no transaction charges on UPI services, after an RBI paper suggested nominal charges on UPI transactions.

What is UPI? – (1) The UPI was launched in 2016 and is operated by the National Payments Corporation of India (NPCI); **(2)** It is a system that powers multiple bank accounts into a single mobile application. The NPCI was formed in 2009 as an initiative of the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA) with the goal to create a robust payment and settlement infrastructure; **(3)** UPI operates on top of the Immediate Payment Service (IMPS) which was created by the NPCI for immediate fund transfers.



What is the current status of UPI and Digital Transactions? - ‘Prime Time For Real Time Global Payments Report 2022’ states that India’s real-time payments include the Immediate Payment Service (IMPS) and Unified Payments Interface (UPI): **(1)** India accounted for the largest number of real-time transactions in 2021 (48.6 billion). The next highest transactions were in China (18 billion transactions); **(3)** The number of transactions in India were almost seven times greater than the combined real-time payments volume of the world’s major developed economies: USA, Canada, the UK, France and Germany (7.5 billion); **(4)** The report also forecasted that the share of all transactions occurring via real time instrument was expected to increase to 70.7% in 2026 from the present 31.3%; **(5)** The number of banks that are live on UPI has increased from 21 in April 2016 to 330 in June 2021. The number of transactions has reached historic high of 5.96 billion in May 2022; **(6)** Monthly transactions crossed the threshold of INR 10 Lakh Crore (value terms) for the first time in May 2022



What are the reasons for wide adoption of UPI? – **(1)** No Merchant Discount Rate (MDR) charges are levied for UPI transactions (unlike card-based transactions). This incentivizes merchants to accept UPI payments; **(2)** UPI is convenient to use compared to alternatives. The users only require a smartphone connected to the internet; **(3)** UPI is supported by a **robust ecosystem** which makes fund transfer seamless and efficient. This includes the expansion of high-speed internet, smartphones, cloud computing that help to fulfil a transaction in a few seconds; **(4)** It offers a **significant degree of security** against misuse like the mobile personal identification number (MPIN) and **two-factor authentication**; **(5)** **COVID-19 pandemic** significantly boosted digital transactions in wake of SMS (Sanitize, Mask and Social Distance) protocols and lockdowns. This also made UPI more popular with the people.

What are the benefits associated with UPI? – **(1)** Widespread adoption of real-time payments helped in savings of US\$ 12.6 billion in transaction costs for payments; **(2)** Digital payments have **improved the cash flow** situation of the businesses as the payments are instantaneous. It helps increase the economic activity; **(2)** With digitalization, **the amount of black money in the market can be reduced** leading to greater compliance and more tax revenue; **(3)** The UPI provides banks with a **low-cost alternative to cash** and helps them save on merchant onboarding costs. The data acquired through digital transactions enables banks to market other services, have a better understanding of the spending pattern, and serve consumers better; **(4)** The **open architecture** of UPI helps fintech firms to drive **innovation** and develop newer products and unique services.

What are the challenges in further scaling-up UPI? – **(1)** Some experts fear UPI would be **difficult to sustain in the long run** without levy of MDR to fund its infrastructure. The government has clarified that no MDR will be charged on UPI (Digital Public Good) and service providers can recover costs by other means; **(2)** Cash transactions are still significant. People **still prefer to use cash** due to its greater

acceptance as a mode of payment; **(3)** A large section of population lacks access to internet and smartphones, limiting the ability to use UPI; **(4)** There is a **lack of digital literacy** in large section of public due to which they are unable to use the UPI system. Further, the **use of English language** is predominant in UPI apps which makes adoption and use of UPI more difficult.

What steps can be taken going ahead? – (1) Expand UPI's impact **beyond the top-tier metropolitan areas**, and replicate its success in rural areas; **(2)** Cost savings from the reduction in hassles and overheads for banks can be used to bear the cost of operating UPI; **(3)** Initiatives like **Bharat Net project** (for internet connection) and **PMGDisha** (for digital literacy) should be implemented with full vigor and support; **(4)** India **must share this technology with fellow countries** to earn forex and also to enhance its soft power across the globe. UPI has already been rolled out in UAE, Singapore and Nepal. In 2019, Google requested the U.S. Federal Reserve to develop a solution similar to India's UPI citing the thoughtful planning, design and implementation behind it. India is the poster child for real-time payments and a shining example of how a coordinated, collective, nationwide effort can unlock huge economic and social potential. Keeping this in mind, the reach and acceptability of UPI need to be enhanced to further **unlock its economic value**.

6. Issues with the Working of Insolvency and Bankruptcy Code, 2016 (IBC)

News: The Bill to amend IBC was listed for introduction in the Monsoon session of Parliament, but it has been withdrawn for further fine-tuning before its introduction in the winter session,

How has the IBC performed till now? –

(1) According to the Insolvency and Bankruptcy Board of India (IBBI) newsletter for January-March 2022, 64.7% of all the cases admitted for the corporate insolvency resolution process (CIRP) since 2016 have been closed. Amongst this, 11% have been withdrawn, about 14% settled, 30% liquidated and 9% resolved (wherein a resolution plan was approved); **(2)** Data released by the IBBI shows that the resolution rate of cases under CIRP is rather low and that the **number of cases seeing liquidation are three times more than those being resolved**. E.g., of the 2,600 cases that were closed by December 2021, 55% ended in liquidation while only 16% were completed with a proper resolution plan approved by the lender. In the initial 6 months of the working of the Code (January-June 2017), all 100% cases were settled; **(3)** The amounts recovered from the debtors have also been low. Since the IBC came into force, **only 32.9% of the claim amounts were recovered**. In January-March 2022, this figure stood at only 10.2% of the claim amounts.

Key Terminology

- **Insolvency:** It is a situation in which a debtor is unable to pay his/her debts.
- **Bankruptcy:** It is a legal proceeding involving a person or business that is unable to repay their outstanding debts.
- **Liquidation:** It is a process of bringing a business/company to an end. It involves distribution of company's assets among creditors and other claimants.
- **Haircut:** It refers to the reduction in the value of an asset. For example, if haircut is 80%, then 80% of credit owed to its creditors will not get recovered.
- **Moral Hazard:** It is a situation where an economic actor has an incentive to increase its exposure to risk because it does not bear the full costs of that risk.

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Objectives of the Insolvency and Bankruptcy Code

- Consolidate and amend all existing insolvency laws in India.
- To simplify and expedite the Insolvency and Bankruptcy Proceedings in India.
- To protect the interest of creditors including stakeholders in a company.
- To revive the company in a time-bound manner.

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What has been the positive outcomes of the IBC? – (1) Before enactment of the IBC, the recovery mechanisms available to lenders were through Lok Adalat, Debt Recovery Tribunal and SARFAESI Act. While the earlier mechanisms resulted in a low average recovery of 23%, the recoveries have risen to 33% under the IBC regime; **(2)** It has helped in improving **India's rank in insolvency resolution indicator** of World Bank's Ease of Doing Business report. The rank improved to 108 in 2019 from 134 in 2014.

What are the challenges associated with the IBC? – (1) Delays in the process: Resolution, and in some cases liquidation, take much longer than the mandated time. The period of resolution has only worsened with time. E.g., of cases involving more than INR 1,000 Crore, the average resolution time was 274 days in FY2018. This has increased to 772 days in FY2022. Cases involving less the INR 50 crore were resolved in 230 days (average) in FY 2018 and 667 days in FY22. The main reason for delay is **chain of litigation** over the decisions. According to a study undertaken by Indian Institute of Insolvency Professionals, every corporate insolvency resolution process on average takes 3 litigation suits; **(2) Big Haircuts:** Longer delays result in larger haircuts, as the value of sick companies tends to diminish at an increasing pace over time. For instance, the lenders have had to take a haircut of ~90% in the case of Reliance Infratel and **96% in the recent Videocon Group case**; **(3) Less Focus on alternatives:** Globally, a mechanism like the IBC's corporate insolvency resolution process (CIRP) has been a last-resort measure. It is used after all other alternatives like mediation, settlement and arbitration have been exhausted. However, in India, there are no specific provisions for mediation under the IBC; **(4) Regulatory Fear:** Banks, especially those in the public sector, are unable to take pragmatic decisions. They feel any risk-taking that could potentially **yield a low rate of recovery** in the short term may **subject them to vigilance inquiries and audits**; **(5) Resource deficit:** The government had proposed to set up 25 additional single and division benches of NCLT in July 2019.

They were established at various places including Delhi, Jaipur, Kochi, Chandigarh, and Amravati. However, most of these remain **non-operational** or partly operational on account of lack of proper infrastructure or adequate support staff.

Key Provisions of the Insolvency and Bankruptcy Code, 2016

The IBC was enacted in 2016. The Code created a **new institutional framework** to facilitate a **formal and time bound insolvency resolution process and liquidation**. The framework includes

- **Insolvency Professionals:** They administer the resolution process, manage the assets of the debtor, and provide information for creditors to assist them in decision making.
- **Insolvency Professional Agencies:** The insolvency professionals are registered with insolvency professional agencies. The agencies conduct examinations to certify the insolvency professionals and enforce a code of conduct for their performance.
- **Information utilities:** They keep a record of debts given by creditors along with details of repayments/dishonour of debt.
- **Adjudicating authorities:** They give approval to initiate the resolution process, appoint the insolvency professional, and approve the final decision of creditors. Adjudicating authority for companies is National Company Law Tribunal (NCLT) while individuals have to approach debt recovery tribunal.
- **Insolvency and Bankruptcy Board:** The Board regulates insolvency professionals, insolvency professional agencies and information utilities set up under the Code.

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What should be the approach?

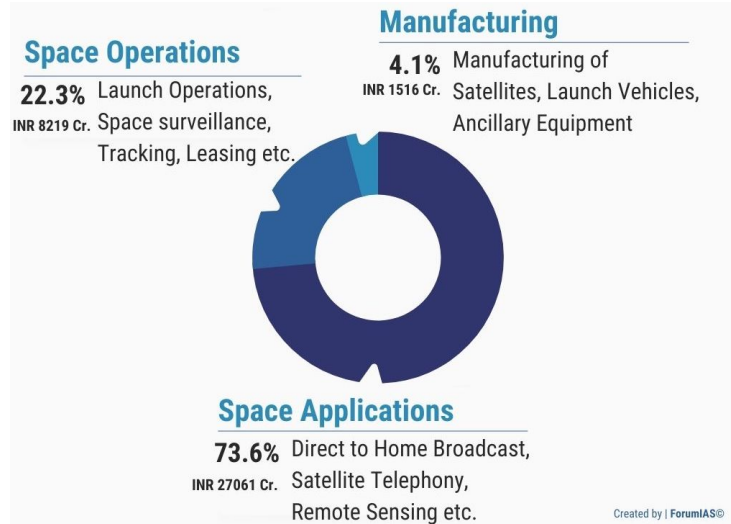
– **(1)** There is a need to **increase the number of NCLT benches and appoint more competent professionals** who have better understanding of the financial system. This will ensure that the IBC platform is **not used as a recovery** but more as a **resolution tool**; **(2)** There is a need to promote **mediation** for out-of-court proceedings, with legislative recognition for speedier dispute resolution. The Mediation Bill 2021 is a step in the right direction. It requires disputants to try and settle civil or commercial disputes through mediation before approaching any court, within a mandated period; **(3)** Bankers should be **protected for bona fide decisions** during the resolution process. A similar provision like the **'business judgment' rule** that is available for board directors in many countries, should be introduced. It protects companies from frivolous lawsuits by assuming that, unless proved otherwise, management is acting in the interests of the corporation and its stakeholders.

The government should take steps to address the loopholes of the IBC in order to make the resolution process more **transparent** and **effective**. It will help recover the maximum amount possible from the defaulters. A **quick resolution process** will also help address the NPA crisis so the banks can issue fresh credit from the freed capital. This will have **long-term positive impact** on the economy.

7. Space Economy in India

News: The Government is expected to release the Space Policy with major focus on increasing participation of the private sector in the Space Economy.

What is the current status of the Space Economy? – (1) The US\$ 450 billion global space market includes: (a) **Upstream market** (commercial satellite market, launch market, and institutional market); (b) **Midstream market** (operator revenue, ground infrastructure, and operations); (c) **Downstream market** (space services and consumer equipment); (2) Another basis of classification divides space economy into 3 components: (a) **Manufacturing of Space-related Equipment** (satellites, launch vehicles and ancillary equipment); (b) **Space operations** (launch operations, space surveillance, tracking, lease, brokerage, etc); (c) **Space-technology based Applications** (Direct-to-Home broadcast, satellite telephony, remote sensing, etc); (3) Researchers from the Centre for Development Studies (CDS) and the Indian Institute of Space Science and Technology (IIST) undertook a study (*'The Space Economy of India: Its Size and Structure'*) to measure the size of India's space economy. They estimated the size to be INR 36,794 crore (approximately US\$ 5 billion) in 2020-21. Further, the estimated size of India's space economy has slipped from 0.26% of GDP in 2011-12 to 0.19% in 2020-21. According to the paper, **space applications** accounted for the major chunk of this evolving space economy, constituting 73.57% (INR 27,061 crore) in 2020-21. It was followed by **space operations** (INR 8,218.82 crore or 22.31%) and **manufacturing** (INR 1515.59 crore or 4.12%); (4) The Global Space Economy is poised to reach US\$ 650 billion by 2030. India has the potential to capture a large share of this expanding sector. At present, USA has the largest space economy with ~55% share in the global space economy.



What is the need to focus on the Space Economy? – (1) **Untapped potential:** India occupies only 2%, of the global space economy. The small share is due to issues like lack of resources and policy uncertainty; (2) **Boosting the Economy:** Allowing private entities into end-to-end space activity would help in achieving a US\$ 5 trillion economy by 2024 and further levels of US\$ 10-12 trillion over coming years; (3) **Low Cost:** The Indian space sector has the potential of launching space vehicles at a much lower cost compared to the West. This will help in getting many foreign contracts; (4) **Rising Demand:** It is estimated that around 10,000 satellites will be launched into low-earth orbit by 2026. The projected growth of small and miniature satellites has increased three times. This provides ample opportunities for small and medium enterprises to enter into the sector; (5) **Presence of Budding Entrepreneurs:** According to a global report published in June 2021, India has 368 private space firms, placing it 5th in the world in size after the US, the United Kingdom, Canada, and Germany.

What steps have been taken by the Government to boost the Space Economy? – (1) **Space Bodies:** The Government has established several bodies like Indian Space Association (ISpA), Indian National Space Promotion and Authorisation Centre (IN-SPACe), Antrix Corporation and New Space India Limited (NSIL) etc. for promotion of space activities; (2) **Opening the Space Sector:** The government has opened up the Space sector to the Indian private sector for participation in the entire domain of space activities. This includes satellite creation, launches, and space-based services that were earlier not

open to them; **(3) Draft Space Activities Bill, 2017:** The Bill aims to promote and regulate the space activities of Indians. It focuses on encouraging the participation of private sector agencies under the guidance and authorisation of the government through the Department of Space.

Space Bodies in India

Indian Space Association (ISpA): It was established in 2021. It will act as a 'single-window' agency for **facilitating space sector business opportunities** for Indian start-ups and the private sector. ISpA will undertake **policy advocacy** and engage with all stakeholders in the Indian space domain.

Indian National Space Promotion and Authorisation Centre (IN-SPACe): It aims to provide a **level-playing field for private companies** to use the Indian space architecture. It will **act as a channel between ISRO and private players** that want to participate in space activity. It will encourage something similar to SpaceX in India. It will allow ISRO to focus on more challenging missions and especially next-generation technology development.

Antrix Corporation: It is a **Central Public Sector Enterprise** under the Department of Space. It was established in 1992 for **commercially utilizing space products of ISRO**, providing technical consultancy services and transferring technologies to industry.

New Space India Limited (NSIL): It is a **Central Public Sector Enterprise** under the Department of Space established in 2019. It has been mandated to transfer the technologies emanating out of the Indian space programme and enable Indian industry to scale up high-technology manufacturing base.

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What are the challenges in the development of the Space Economy?

– **(1) Budgetary Constraints:** The CDS and IIST study noticed a decline in the budget for space-related activities. This led to a reduction in the size of the space economy in the last 2 years; **(2) Lack of Data:** The current CDS and IIST paper was a first attempt to measure the size of the space economy. Even this was unable to establish the size of the space-based remote sensing industry; **(3) Space Debris:** Since the market is open, more corporations can send their vehicles and satellites up into space, which is already crowded. By some estimates, there are over 15,000 traceable and over 200,000 1-10 cm long pieces in near-earth space; **(4) Absence of a Legislative Framework:** The draft Space Activities bill was introduced in 2017 but remains pending; **(5) Brain Drain:** Talented human resources emigrate from the country for better opportunities and careers that might hamper development of the space sector; **(6) Lack of robust Dispute Settlement Mechanism:** This discourages private investment in the space sector e.g., the **cancellation of Antrix-Devas deal** impacted investor confidence and hurt India's reputation as investment-friendly destination.

What more steps can be taken? – **(1)** The participation of private sector should be encouraged as it is key to increasing the size of India's space economy and improved integration with the global private space industry; **(2) FDI reform** is crucial to further decentralize investment decisions. The US firm Hughes Communications announced a US\$ 500 million investment but has not been able to get approvals since 2017; **(3)** In case of **space debris**, coordination between the public and private sector will come into play. The government can decide on exactly how many programmes can be allowed in space and if they can partner in the removal of space debris; **(4)** The **passage of the Space Activities Bill** should also be done in order to give private players greater clarity and protection. This should involve proper consultation and discussions with the concerned stakeholders.

The current scenario presents an ideal opportunity for India to unleash the potential of its space economy. In this regard, right policy initiatives and support are desired to make the space economy reach its target of US\$ 50 billion by 2024.

8. Exploration of Lithium

News: The Union Government has listed a Bill in the Parliament related to mining sector reforms. It is expected to allow private companies to mine lithium.

What are the estimates of Lithium Resources? – **(1) Global:** According to the **US Geological Survey**, the global reserves are ~90 million tonnes (MT). The top countries with lithium resources are Bolivia (21 MT), Argentina (19 MT), Chile (9.8 MT), US (9.1 MT), Australia (7.3 MT), and China (5.1 MT).; **(2) India:**

According to the government, no reserves or resources of lithium-bearing metals are so far part of the national-mineral inventory.

What measures have been taken for exploration of Lithium reserves in India? – (1) The **Geological Survey of India (GSI)** has carried out **14 projects** on lithium in Bihar, Chhattisgarh, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Meghalaya, Karnataka, and Rajasthan between 2016 and 2021; (2) The **Atomic Minerals Directorate for Exploration and Research (AMDER)** has carried out preliminary surveys in **Mandya district of Karnataka**. The surveys have shown the first traces of lithium resources of 1,600 tonnes in the country. But the reserves found are classified in the “**inferred category**”. Therefore, the associated confidence level is low; (3) Indian companies are tying up with suppliers in countries that have major resources; (3) Australia – the largest country in terms of production of Lithium – has signed a deal to supply India with critical minerals needed for the new-energy economy; (5) India has planned to set up a Giga factory for lithium-ion cell manufacturing in India by 2024. The Li-mineral will be sourced from mines in South America, Africa, and Australia; (6) The **PLI scheme ‘National Programme on Advanced Chemistry Cell (ACC) Battery Storage’** is also aimed at reducing imports by building a manufacturing capacity of 50-gigawatt hour (GWh).

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Lithium

Lithium is the **lightest metal**. It is also called ‘**white gold**’. It is an essential component in **electric vehicle (EV) batteries**. 74% of overall global lithium production is used in battery production.

What is the status of lithium imports? – (1) India’s EV Sector is dependent on Lithium imports. Lithium is primarily imported in the form of **lithium-ion batteries** for EVs and **energy storage systems (ESS)**; (2) India’s imports of lithium and lithium-ion in FY21 stood at Rs 8,984 crore which increased to Rs 13,838.22 crore in FY22.; (3) China and Hong Kong are the major sources of India’s lithium imports.

What are the challenges? – Globally, the demand for Li-battery has surged. The prices of lithium carbonate, used in rechargeable lithium batteries, have increased a lot e.g., in the last one year, prices of **lithium carbonate** from China increased by more than **400%**. There is a plan to increase penetration of EVs to 30% by 2030. Therefore, India will be dependent upon lithium imports. Shift to EVs will reduce India’s dependence on oil, but increase on lithium.

9. Electricity Amendment Bill, 2022

News: The Government has tabled the Electricity Amendment Bill, 2022 in the Lok Sabha. The Bill has been referred to the Parliamentary Standing Committee on Energy.

What is the Electricity Amendment Bill, 2022? – The Bill amends the Electricity Act, 2003. The Act regulates the electricity sector in India. It set up the Central and State Electricity Regulatory Commissions (CERC and SERCs) to regulate interstate and intrastate matters, respectively.

What are the key provisions of the Bill? – (1) **Multiple DISCOMs in the same area:** More than one power distributor can operate in an area and they will be allowed to use the power distribution infrastructure of other suppliers. It’ll boost competition and give more choice to the consumers. It is based on the **principle of open access**, i.e., the right of consumers to choose their electricity provider, regardless of who controls the physical infrastructure; (2) **Tariffs:** Mandatory fixing of minimum and maximum tariff ceilings by an appropriate commission to avoid predatory pricing by power distribution companies and to protect

consumers; **(3) Timely Tariff Revisions:** Graded and timely tariff revisions to help provide state power utilities with enough cash to be able to make timely payments to power producers; **(4) Cross-subsidy Balancing Fund:** Any surplus with a distribution licensee on account of cross-subsidy will be deposited into the fund, to be set-up by the state governments. The fund will be used to finance deficits in cross-subsidy for other DISCOMs; **(5) Renewable purchase obligations (RPOs):** The Act empowers SERCs to specify renewable purchase obligations (RPOs) for DISCOMs. RPOs refer to the mandate to procure a certain share of electricity from renewable sources. The Bill adds that RPO should not be below a minimum percentage prescribed by the Union government. Failure to meet RPO will be punishable with a penalty between 25 paise and 50 paise per kilowatt of the shortfall; **(6) Strengthen Regulators:** The Bill seeks to strengthen payment security mechanisms and give more powers to regulators.

What are the reasons for opposition to the Bill? – (1) Opposition Parties claim that the Bill is **violative of India's federal structure** in as much as electricity falls in **concurrent list (item 38)**. The Union Government should have consulted States.

Several provisions infringe upon the rights of States to regulate supply and **pricing of electricity**; **(2)** The provision to encourage competition may lead to more entities entering lucrative and urban areas, while **loss-making areas** may continue to be underserved; **(3)** Some farmers' bodies are concerned that it will eventually lead to the end of subsidies power; **(4)** There are also fears that the **privatisation of distribution companies** and generating units might result in **loss of jobs**.

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Cross-subsidy

Cross-subsidy refers to the arrangement of one consumer category subsidizing the consumption of another consumer category. The subsidizing category pays higher tariffs than subsidized category e.g., the price of electricity is higher for commercial sector than households. Similarly, in railways, freight tariffs are higher than passenger fares.

Electricity Act, 2003

- The Electricity Act was passed in the Parliament in 2003.
- Its aims were to
 - Consolidate the laws relating to generation, transmission, distribution, trading and use of electricity.
 - Protect consumers' interest and supply of electricity to all areas, rationalisation of electricity tariff, transparent policies regarding subsidies etc.
- The Act paved the way for privatisation of distributing companies (DISCOMs).
- An amendment in 2007 included provisions for 'cross subsidy'. This ensured subsidy to poor households.

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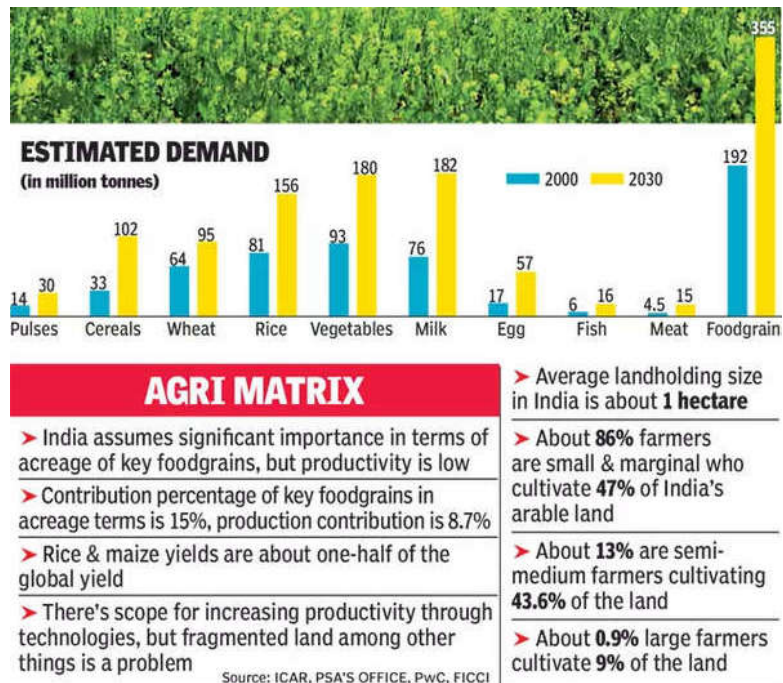
10. Use of Artificial Intelligence in Agriculture

News: PwC and FICCI have released a report titled 'Redefining agriculture through artificial intelligence: Predicting the unpredictable'.

What is the need to use AI in the agricultural sector? – (1) India is expected to surpass China and become the **world's most populated country** by 2023. There would be immense pressure to feed such a huge population base; **(2)** According to the **Indian Council of Agricultural Research (ICAR)** in 2030, the demand for pulses, cereals, rice, eggs, fruits, vegetables, and milk will have **risen by more than 100%** compared to 2000. The demand for food grains is expected to jump by more than 85%; **(3)** According to the NITI Aayog, AI has the potential to add **\$1 trillion** to India's economy by 2035 and a significant amount of this would be in the agriculture sector.

What are the applications of AI in agriculture? – (1) It can help in efficient and cost-effective **resource and yield management**; **(2)** AI, cloud computing, satellite imagery, and advanced analytics, in combination, can create an

ecosystem for **smart agriculture**; (3) It can be useful in **prediction analysis**. It will ensure the highest possible yields based on the **seasonal forecast models** e.g., it can enable farmers to extract and analyze information such as weather, temperature, water consumption, or soil conditions through data collected directly from their fields; (4) It has the potential to address **supply-demand mismatch** in real-time e.g., a **supply-demand predictor** (that can map supply and demand), can reduce this issue significantly; (5) Artificial intelligence can help in **precision farming**. By detecting and targeting weeds in the identified buffer zone, it can tell whether pesticides or weedicides should be used. This can lead to **higher yields** and **reduce use of chemicals**; (6) AI-based natural **language translation** facilitates the issuance and spread of agri-advisories, weather forecasts, and early warnings for droughts in **multiple vernacular languages**; (7) Image recognition using AI approaches can help **identify pest infestation**, and **disease diagnosis**.



What are the associated challenges? – (1) Lack of proper **infrastructure** and **know-how**; (2) **Resistance to change** due to faith in conventional methods, lack of awareness and scarcity of capital for investment; (3) **Fragmentation of land** could also prove to be a hurdle for economic viability of investing in technology.

What measures have been taken for the application of AI in agriculture? – (1) ICAR has proposed **cyber agro-physical systems** to make Indian farming a **viable, self-sustaining, and internationally competitive enterprise**; (2) NITI Aayog has identified agriculture as one of the focus areas as part of its national strategy for AI; (3) Several states are taking initiatives to use AI in agriculture: (a) **Karnataka** has partnered with a leading MNC for agricultural produce, price-related information, and intelligence using predictive modelling; (b) **Uttar Pradesh** is collaborating with the Bill and Melinda Gates Foundation (BMGF) and the Tata Trust to set up the **Indian agritech incubation network** at IIT-Kanpur; (c) **Maharashtra** has launched the **Maha AgriTech project** that is aimed at utilizing and promoting the application of satellites and drones to solve various agrarian problems.

11. Amendments to Energy Conservation Act and Carbon Markets

News: The Union Government has introduced a Bill to amend the Energy Conservation Act, 2001. The amendments are expected to facilitate the achievement of more ambitious climate action targets. One of the proposed changes is to establish domestic carbon market to facilitate trade in carbon credits.

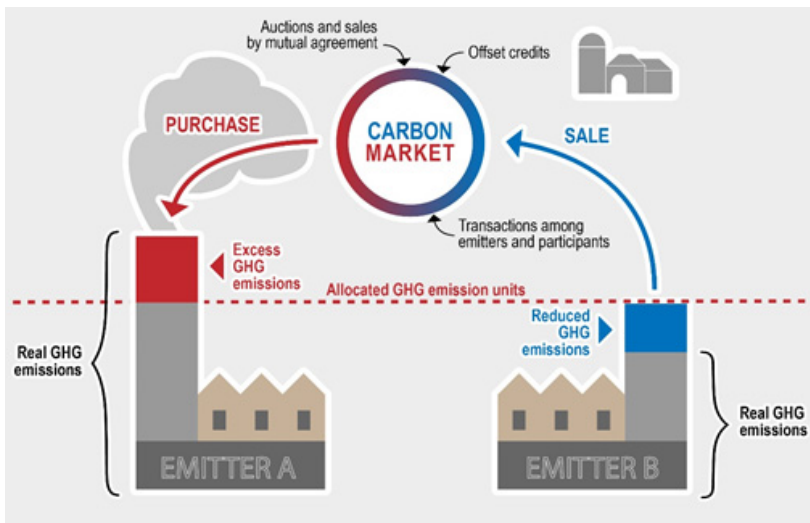
What is a Carbon Market? – (1) Carbon Markets and Carbon Credits are components of emissions trading, a **market-based approach** to reduce the concentration of Greenhouse gases (GHG) in the atmosphere; (2) It **provides economic incentives** for reducing the emissions. A carbon market allows corporations to trade carbon credits; (3) One **carbon credit** equals one tonne of CO₂ or the equivalent amount of a different GHG reduced. Limits of carbon emissions are prescribed for designated pollutants (like steel or cement factory). These limits

are called '**benchmark emission**'. If the emissions are less than the limit, the emitter earns carbon credit. (Say limit is 10 tonnes of CO₂ and emissions are 9 tonnes, then the emitter earns 1 carbon credit). If some plants exceeds the limit (say it emits 11 tonnes), they can buy the credit. Thus, crossing the emissions limit imposes a cost (amount spent on purchase of carbon credits) on the emitter. The idea is that this cost will force the emitters to be more efficient and reduce emission; (4) Carbon Markets were allowed under the **1997 UN Kyoto Protocol**. Its **Clean Development Mechanism (CDM)** allowed industrialized countries to reduce emissions abroad where it could be better achieved such as by **planting trees in the tropical countries**; (5) There are two types of carbon markets: (a) One is a **regulated market**, set by 'cap-and-trade' regulations at the regional and state levels; (b) The other is a **voluntary market** where businesses and individuals buy credits (of their own accord) to offset their carbon emissions.

Energy Conservation Amendment Bill, 2022

- The Bill seeks to make it **compulsory** for a select group of industrial and commercial consumers to use **green energy**. A prescribed minimum proportion of the energy they use must come from renewable or non-fossil fuel sources.
- The Bill seeks to **establish a domestic carbon market** and **facilitate trade in carbon credits**.
- The Bill seeks to **widen the scope of energy conservation** to **include large residential buildings** as well. Till now, the energy conservation rules applied mainly on industrial and commercial complexes.

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Clean Development Mechanism (CDM)

It is a UN-run carbon offset scheme **allowing countries to fund GHG-reducing projects in other countries** and claim the saved emissions as part of their own efforts to meet international emissions targets. CDM assists **non-Annex I countries** (developing nations) to reduce their carbon footprints; and **Annex I countries** (industrialized nations) to **achieve compliance** with their emissions reduction targets (GHG emission caps).

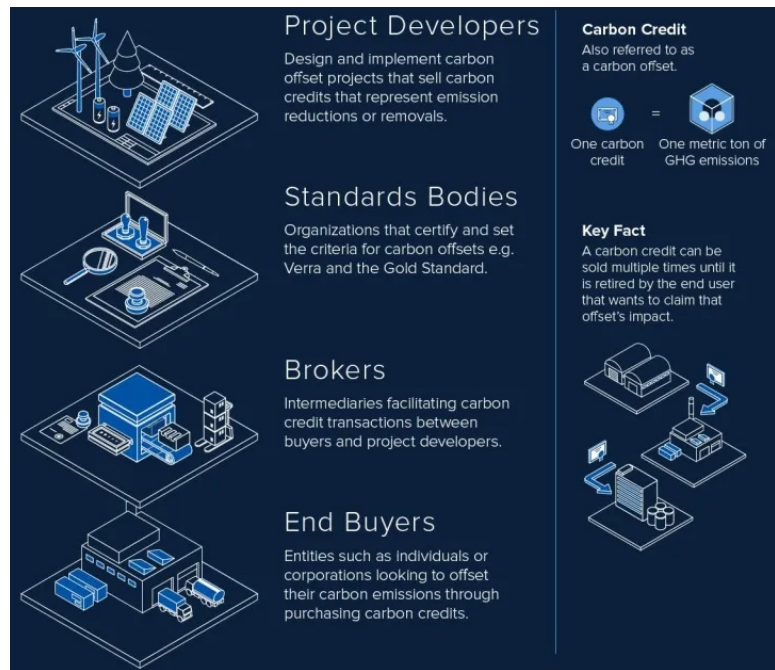
How can companies offset carbon emissions? - There are multiple ways for companies to offset carbon emissions. They are broadly classified into (a) **Carbon Avoidance or Reduction Projects** (i.e., reduce the amount of carbon emitted); (b) **Carbon Removal or Sequestration Project** (i.e., remove the carbon already emitted from the atmosphere). Carbon reduction measures include investing in renewable energy (like solar, wind), improving energy efficiency (e.g., using more efficient cooking stoves) etc. Carbon sequestration measures include capturing carbon to produce biofuel, promoting forest growth etc.

What is the status of Carbon Markets across the world? - Carbon markets exist at both national/regional and international level. EU (Emission Trading Scheme), China, US, India (Perform-Achieve-Trade Scheme) have domestic carbon markets for emission trading. The system of international carbon market under Kyoto Protocol functioned well for a few years. But the market collapsed because of the lack of demand for carbon credits. A similar carbon market is envisaged to work under the **Paris Agreement**, but its details are still being worked out.

What are the advantages of a Carbon Market? – (1) It will help in **mitigating the adverse impacts** of climate change by reducing the GHG emissions; (2) There are multiple **co-benefits of offset projects** such as: ecosystem management, forest preservation, sustainable agriculture, renewable energy generation etc.; (3) It opens an **additional revenue stream** for environmentally beneficial businesses. For instance, Tesla, the electric car maker, sold carbon credits to legacy car manufacturers to the tune of \$518 million in just the first quarter of 2021.

What are the challenges in the functioning of Carbon Markets? –

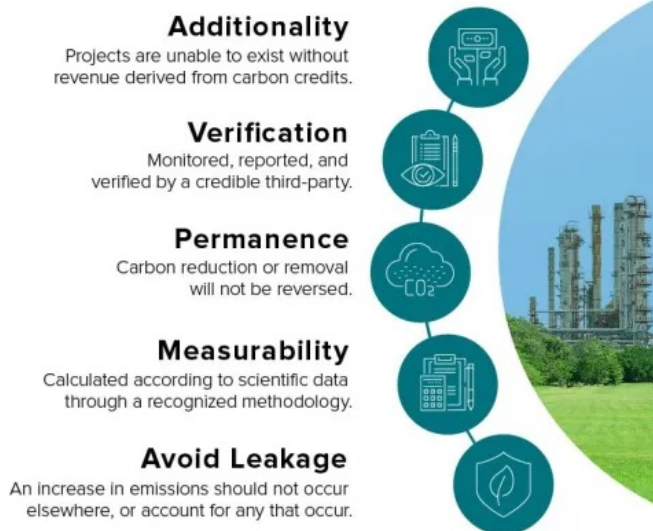
- (1) **Effectiveness:** There are concerns regarding the **effectiveness of carbon markets in curbing emissions**. Some companies simply buy credits without making any effort to reduce emissions as they find it **cheaper to buy carbon credit than to invest** in emission reducing technologies e.g., an analysis of the PAT Scheme for thermal power plants (by Centre for Science and Environment) found that the value of one **ESCert** (Energy Saving Certificates, similar to carbon certificates) is very less – INR 700 – compared to the actual investment of INR 4,020 for reducing one tonne equivalent energy consumption. Unless the price of carbon credits is higher than the cost of reducing emissions, there is no incentive for high emitters to make efforts for reducing own emissions;
 - (2) **Quality of Emission Reduction:** Environmental activists argue that **only high-quality carbon offsets* are effective** in reducing emissions (*High quality carbon offsets have certain features like (a) **Additionality:** Emission reductions must be additional i.e., they would not have occurred in the absence of a market for offset credits e.g., a renewable project could be set up only because a high emitter paid for it; (b) **Verifiable:** There must be proper audits to ensure monitoring, reporting and verification of emission cuts; (c) **Permanence:** The emission reduction should not be reversed).
- Credits available in markets are of **poor quality**. Most of the credits are not ‘additional’ i.e., the emission reduction projects would have happened even in absence of carbon credits (without any prospect for project owners to sell carbon offset credits). Also, it is **very difficult to establish ‘additionality’**. According to a USA-based environmental group, more than 60% percent of credits on the market are from projects that have questionable additionality claims. In some cases, the **emission reduction is not permanent**. There have been instances where afforestation projects were undertaken to buy carbon credits. However, later on the planted trees were cut-off, thus reversing the reduction;
- (3) Buying carbon credits can deviate **the rich nations** from the path of reducing emissions. They can simply continue to **emit and buy cheap carbon credits** from developing countries;
 - (4) There is a **huge surplus of carbon credits** in the voluntary markets. According to an estimate, credits for about a billion tons of CO₂ have been put up for sale on the voluntary market. Huge surplus suppresses the price of carbon credits and it becomes easier for emitters to offset and while continuing with high emissions;
 - (5) It is difficult to establish the amount of carbon reduced by offset projects (like afforestation or wind energy project). The complexity is in establishing **baseline emissions**, which makes it difficult to verify emission



reductions and **assigning carbon credits**. India's own PAT Scheme has failed to achieve meaningful emissions reduction. According to an analysis by CSE, the emission reduction under the scheme has been only 1.57% and 1.44% over the two cycles.

What should be done going ahead? – (1) There is a need to create a **national level environment regulator** on the lines of SEBI in order to ensure **carbon markets work efficiently**; **(2)** There must be strong regulatory safeguards to ensure that the **emission offsets traded are of high quality**. Else, an ineffective carbon market can end up doing more damage; **(3)** It is crucial that cap-and-trade does not end up as an **inspect-and-extort regime** in India. For this, **tech-enabled open verification** models can be adopted.

High-Quality Carbon Offset?



The establishment of a domestic carbon market is a progressive step. However, the actual benefit will depend upon the effectiveness of the market. For this, government must ensure that proper regulations are established. Moreover, there must be **periodic assessment** of its functioning and **corrective steps** are necessary.

Factly

Polity

1. High Proportion of Under-trials and Judicial Vacancies

News: Law Minister Kiren Rijju and Chief Justice of India, N V Ramana shared views on judicial pendency at the 18th All India Legal Services Authorities Meet in Jaipur. Law minister suggested the target of settling 20 million in two years. The CJI N V Ramana attributed the pendency to the vast number of vacancies in the judiciary, and insufficient infrastructure.

Current Status

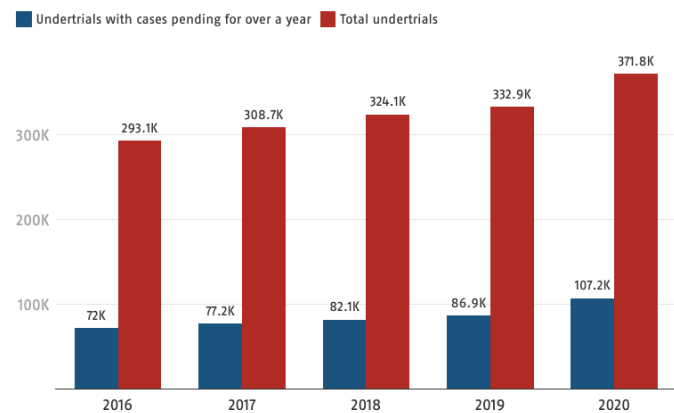
Undertrials: The number of undertrial people in prisons has increased by 26% between 2016 and 2020. The undertrials take up 90% of the total prison capacity.

Judges per million: In India, there are just 14.4 judges for every one million population compared to 210 judges per million in Europe and 150 in the United States. In 2003, the **Committee on Reforms of Criminal Justice System** headed by Justice V S Malimath, had recommended raising India's judge strength to 50 per million.

Vacancies: There are 24,521 sanctioned posts in the lower courts, of which 5,180 (21%) are vacant. In the High Courts and the Supreme Court, 34.4% of the sanctioned strength (1,108) are vacant.

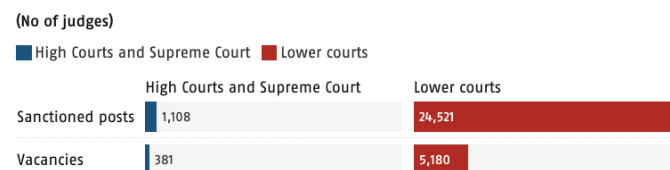
Pendency of Cases: The lower courts have 42 million open cases. There are another 5.9 million cases before the HCs and 72,062 before the Supreme Court. (Refer EPIC February 2022 for High Proportion of Under-trials in Prison).

A quarter of undertrials are languishing for over a year



Source: Rajya Sabha, Prison Statistics

Vacancies in judicial system are high



Source: Department of Justice

2. Administrative Capacity and Underspensing by States

News: According to a CAG audit report, states often spend less money on health and education for lack of departmental capacity, rather than lack of funds.

States Spending on Education and Health

States often spend far less money on education and Health. The unused allocated budget for education and health is also often large. For example, in **education**, government of Delhi could not spend 21% of its education department budget for the year FY20 (a pre-Covid-19 year). In **health**, Odisha ended up with savings of 17% in its health and family welfare budget in a COVID-19 year. Based on these facts, the CAG report observed that the states spend less money on health and education not due to lack of funds but due to a lack of departmental capacity.

World Bank and UN on Education

According to the World Bank-UNESCO 'Education Finance Watch' report: Education budgets are not adjusting in proportion to the challenges brought about by COVID-19, especially in poorer countries. It argues that recent increases in public education spending have been associated with relatively small improvements in education outcomes.

3. Family Courts (Amendment) Bill, 2022

News: Lok Sabha has passed the Family Courts (Amendment) Bill, 2022

About the Family Courts Act, 1984

The Family Courts Act, 1984 allows **State Governments to establish family courts to promote conciliation** and ensure that **disputes related to family affairs and marriage** are promptly settled. The setting up of family courts and their functioning comes under the purview of the State Governments in consultation with their respective High Courts. The Act also lays down provisions for the appointment of judges in family courts. There are 715 Family Courts functioning in 26 States and Union Territories.

Family Courts (Amendment) Bill, 2022

The Bill amends the Family Courts Act, 1984 to establish family courts in Himachal Pradesh (HP) with effect from February 15, 2019, and in Nagaland with effect from September 12, 2008. There are 3 Family Courts in HP and 2 in Nagaland. However, there was no notification by the Union Government for bringing the said Act into force in these States. The amendment bill plugs this gap.

4. Suspension of Members of Parliament (MPs)

News: 27 MPs were suspended by the two Houses of the Parliament during the Monsoon Session, 2022.

Disruption by the MPs

There are 4 broad reasons leading to disorder in legislatures: **(a)** Lack of time available to MPs for raising important matters; **(b)** Unresponsive attitude of the Government; **(c)** Deliberate disruption by parties for political purposes; **(d)** Absence of prompt action against MPs disrupting parliamentary proceedings.

Suspension of MPs

Rules for ensuring the smooth functioning of Parliament have been mostly unchanged since 1952. The presiding officers can direct an MP to withdraw from the House for any disorderly conduct. If the MP continues disrupting the House, the presiding officer can 'name' the legislator. After that, the House can move a motion to suspend the MP until the end of the session. These powers are common to the presiding officers of both Houses.

In 2001, Lok Sabha changed its rules to give the Speaker more powers. According to this rule, the Speaker can 'name' an MP, who shall then automatically stand suspended for 5 days or the remaining part of the session. This rule removes the need for the House to pass a motion for suspension. Rajya Sabha has not incorporated this provision in its procedures.

Intervention by Courts in a matter of suspension of MPs

Article 122 of the Constitution says Parliamentary proceedings cannot be questioned before a court. However, in some cases, courts have intervened in the procedural functioning of legislatures e.g., the Maharashtra Legislative Assembly passed a resolution in its 2021 Monsoon Session suspending 12 MLAs for a year. The matter

came before the Supreme Court which held that the resolution was ineffective in law beyond the remainder of the Monsoon Session. (Refer EPIC February 2022 for Supreme Court's Judgment on Suspension of MLAs from Assembly).

5. Limitations on Immunity of Members of Parliament (MPs) from Arrest

News: The Chairperson of Rajya Sabha has clarified that MPs do not enjoy any immunity from arrest in criminal cases when the House is in session.

About the Privilege of MPs on arrests

Under Article 105 of the Constitution, MPs enjoy certain privileges, so they can perform their duties without any hindrances. An MP **cannot be arrested in a civil case** 40 days before the commencement of the session or committee meeting and 40 days thereafter. This privilege is already incorporated under **Section 135A of the Civil Procedure Code, 1908**. However, **in criminal matters, MPs do not enjoy any immunity from arrest** during the session or otherwise.

Supreme Court Judgements

K Anandan Nambiar Case: The SC held that the true Constitutional position is that so far as a valid order of detention is concerned, an MP can claim no special status higher than that of an ordinary citizen and is as much liable to be arrested, detained or questioned even during the Session.

State of Kerala Vs K. Ajith and Others: The SC observed that privileges and immunities are not gateways to claim exemptions from the general law of the land, particularly in the case of criminal law which governs the action of every citizen.

6. Right of Mothers to decide Surname: The Supreme Court's Judgment

News: The Supreme Court has ruled that a mother, being the sole natural guardian of the child after the death of the biological father (her husband), has the right to decide the surname of the child.

About the Case

A petition was filed in the Supreme Court challenging a judgment passed by the High Court of Andhra Pradesh in 2014. The High Court had asked to restore the child's surname to the previous one and to show the name of the late husband in records as his natural father. If that was not possible, the court asked to mention the new husband as child's stepfather.

Supreme Court's Judgment

The Supreme Court overturned the AP High Court's Judgment. The SC observed that a surname refers to a name that a child or person shares with the rest of the members of the family. Surname is not only indicative of **lineage** it also plays important role with regard to conveying **the social reality** and provides **a sense of being for children** in their particular environment. Homogeneity of surname emerges as **a mode to create, sustain and display family**. Hence, the SC ruled that the mother, if remains to be the only natural guardian, can decide the surname of the child and even give the kid up for adoption.

7. The Supreme Court's Judgment on Abortion by Unmarried Women

News: The Supreme Court has recently allowed an unmarried woman to terminate her pregnancy in the 20-24 week period.

About the Judgement

The Medical Termination of Pregnancy Act, 2021 and its Rules permit termination of pregnancies of up to 24 weeks in only specific categories, including survivors of rape or sexual assault, minors, in case of physical disabilities and fetal malformation. These categories represent women who are 'extremely vulnerable'.

Supreme Court's interpretation: The SC held that the Legislature has not just used the word 'husband'. It has used the word 'partner'. So, the legislature is not just concerned about women who undergo pregnancy within marriage, but outside marriage too. Thus, the judgement **allows access to medical abortion for unmarried women as well.**

Other Related Judgments

S Khushboo Case, 2010: The SC recognised the legality of live-in relationships and pre-marital sex.

Suchita Srivastava Case, 2009: The SC recognised woman's right to make reproductive choices as part of the "personal liberty" guaranteed under Article 21.

K S Puttaswamy Case, 2017: The SC reaffirmed that women's right to bodily integrity is part of the fundamental right to privacy. (Refer EPIC May 2022 for Debate Regarding Abortion, EPIC March 2022 for WHO Guidelines on Abortion).

Policy

1. Namsai Declaration

News: Assam and Arunachal Pradesh have signed Namsai Declaration to resolve border disputes.

About the Declaration

The declaration marks the resolution of the principle of disputes regarding 37 locations out of 123 disputed villages along the borders between the two states.

Now disputes regarding the remaining 86 border locations will be assessed by the regional committees of both states and a final resolution will be arrived at based on the reports of these committees.

Out of the 37 villages, 34 villages fell within the border of Arunachal Pradesh, the rest three lay in Assam.

(Refer EPIC February 2022 for Assam-Arunachal Pradesh Border Dispute).

2. Demand of Tribal Status for Hatti Community

News: The Government of Himachal Pradesh has requested the Government of India for the inclusion of Hatti community in the list of Scheduled Tribes in the State.

About the Hatti Community

The Hattis are a close-knit community who take their name from their traditional occupation of selling home-grown crops, vegetables, meat, and wool at small-town markets known as 'haats'.

The Hatti homeland straddles the Himachal-Uttarakhand border in the basin of the Giri and Tons rivers, both tributaries of the Yamuna. They live in the Trans-Giri area in today's Himachal Pradesh and Jaunsar Bawar in Uttarakhand.

Jaunsar Bawar was once part of the royal estate of Sirmour. It was conquered by the British in 1814. The two Hatti clans, in Trans-Giri and Jaunsar Bawar, have similar traditions, and inter-marriages are common.



Caste System: There is a rigid caste system among the Hattis. The Bhat and Khash are the upper castes while the Badhois are below them. Inter-caste marriages have traditionally remained strictly forbidden.

Traditional Council: The Hattis are governed by a traditional council called **Khumbli**, which is like the *khaps* of Haryana. The council decides community matters. The *Khumbli*'s power has remained unchallenged despite the establishment of the Panchayati Raj System.

The list of STs in Himachal Pradesh includes Gaddis, Gujjars, Kinnaras (Kinnauras), Lahaulas, Pangwalas, and some other smaller tribes.

3. Missed DPT Vaccines

News: According to a WHO, UNICEF Report, the world recorded the largest sustained decline in childhood vaccinations in approximately 30 years.

Key Findings of the Report

Global findings: Around 25 million children in 2021 missed one or more doses of a DPT vaccine (a combination vaccine against diphtheria, tetanus and pertussis). The latest numbers are worse than the 2 million who missed one or more doses in 2020. The percentage of children who received three doses of DPT dropped 5 points to 81% between 2019 and 2021. This represents the largest sustained decline in childhood vaccinations in 30 years.

The factors behind the decline include larger numbers of children living in conflict areas, increased misinformation about vaccines and COVID-19-related issues (reduced services, supply chain disruptions).

Findings related to India: The COVID-19 pandemic impacted India's immunization programme with an estimated 3 million children not having received the first dose of the DPT vaccine in 2020.

India launched Intensified Mission Indradhanush 4.0 in February 2022. It is globally the largest vaccination drive reaching out to missed children and pregnant women.

4. National Family Planning Summit

News: The National Family Planning Summit was held recently where the Family Planning Vision 2030 document has been released. The document focuses on strategies to overcome teenage childbearing, lack of male participation in awareness programmes and access to contraceptives etc.

About the National Family Planning Summit, 2022

It was organized by the Ministry of Health and Family Welfare. The theme of the Summit was, 'Sustaining efforts, Steering Partnerships, Shaping Vision in Family Planning – *Sabka Saath, Sabka Vishwas, Sabka Prayas & Sabka Vikas*'.

Key Highlights from the Union Minister for Health and Family Welfare Address

India was the first country in the world to have launched a National Programme for Family Planning in 1952. India has achieved replacement level fertility with 31 States/UTs achieving a Total Fertility Rate of 2.1 or less. Modern contraceptive usage in India has increased substantially to 56.5% (NFHS 5).

Mission Parivar Vikas (2016) has given further impetus to the National Family Planning Program. Under the scheme, innovative strategies like the distribution of **Nayi Pahel** kits, **Saas Bahu Sammelan** and **Saarathi vans** are helping to reach out to the community and initiate dialogues on Family Planning, healthy birth spacing and the importance of small families.

Key Highlights from the Family Planning Vision-2030 Document

India's Population: India has the second-largest population in the world. India's population has reached 136.3 crores (1.36 billion) and is expected to reach 147.9 crores (1.47 billion) by 2031 and 152.2 crores (1.52 billion) by 2036. India's population could grow until mid-century (due to population momentum). The population growth will decline substantially after that.

Teenage Fertility Rate: The fertility rate has stabilized all across the country. But the high teenage fertility in some areas remains a cause of concern. As per data, there has been a steady decline in teenage childbearing from 7.9% in the National Family Health Survey (NFHS-4) to 6.8% (in the NFHS-5). But this issue remains a priority area that requires to be addressed, especially since India will continue to have one of the youngest populations in the world until 2030.

Contraceptive use: The modern contraceptive use among married adolescents and young women is increasing over time. But it still remains low. The two most important underlying factors are child marriage and teenage pregnancy.

Male Contraceptive use: The use of male contraceptive methods is largely limited to condoms. Male sterilization was at 0.3%. Hence, the priority will be to encourage the participation of men in the family planning programme.

5. Violation of Sports Code

News: All-India Football Federation (AIFF) has been suspended by FIFA due to purported deviation from agreed Sports Code. Indian Olympic Association (IOA) faces potential suspension for similar reason from International Olympic Committee

About the Sports Code

The Sports Code or National Sports Development Code of India was introduced by the Union Government in 2011. Its purpose is to introduce good governance practices in the management of sports at the national level without interfering with the autonomy of the national sports bodies. The code lays down **restrictions on the age and tenure** of the office-bearers of federations apart from envisaging **transparent functioning** and **free-and-fair elections**.

Violation of the Sports Code

AIFF and IOA were put under a Committee of Administrators (CoA) by courts. The Supreme Court appointed a three-member CoA led by a former Supreme Court judge to run the AIFF whose president had to resign as he had been the president for more than 12 years. The Supreme Court agreed to CoA's proposal of 23 members in the executive council. But in the draft constitution discussed by CoA with FIFA, the number was 12 including one president and one treasurer.

Similarly, the Delhi High Court had ordered to bring the Indian Olympic Association (IOA) under the CoA. But this decision has been stayed by the SC after IOA approached the court about threat of suspension.

Economy

1. RBI Eases Norms for External Commercial Borrowing (ECB)

News: The RBI has relaxed the norms for companies raising external commercial borrowings. This has been done to stem the slide of the Rupee with respect to the USD.

About External Commercial Borrowings (ECBs)

ECBs are commercial loans that eligible resident entities raise from outside India. ECBs include buyer's or supplier's credit, foreign currency convertible bonds, foreign currency exchangeable bonds, and loans among others. ECBs can be raised via the **automatic route** where cases are examined by Authorized Category Dealer or the **approval route** where borrowers are mandated to forward their request to RBI through their authorized dealers.

Relaxation in ECB Norms

RBI has increased the quantum of funds that can be raised by Indian firms through ECBs. The limit has been increased from US\$ 750 million to US\$ 1.5 billion till December 2022, under the automatic route. The objective of this relaxation was to increase the supply of foreign exchange reserves and thereby prevent the fast depreciation of the rupee witnessed over the last few months.

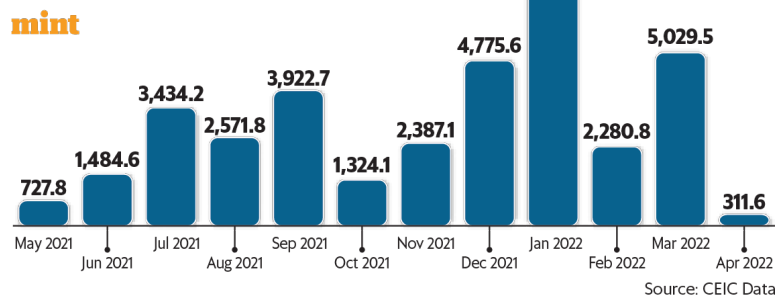
Benefits of raising Credit through ECBs

(a) Companies can borrow credit at a lower interest rate from abroad; (b) ECBs offer flexibility to borrow a large volume of funds for a relatively long period of time; (c) Borrowing in foreign currencies enables companies to pay for their machinery imports etc. thereby nullifying the impact of varying exchange rates; (d) ECBs help in diversifying the investor base and access funds at lower cost. This improves profitability.

Rise and shine

India's external commercial borrowing will have to rise to help boost the country's forex reserve.

External commercial borrowing
(in \$ million)



Risks associated with ECBs

ECBs are susceptible to **exchange rate risk**. If the currency depreciates during the term of loan, it **raises cost of debt servicing** (a simplified example: a company borrows US\$ 1 million @10% annual interest for 1 year when the exchange rate was INR 70/\$. Thus, it borrowed INR 70 million in Rupee terms. If after 1 year the Rupee has depreciated to INR 80/\$, then the company ends up paying INR 80 million + 0.8 million interest, instead of INR 70 + 0.7 million interest).

2. Limited Benefits of Loan-waiver Schemes

News: A study conducted by the State Bank of India has found that the loan-waiver schemes provide limited relief to farmers.

Key Findings of the Study

Implementation of Farm Loan Waiver Scheme by States: Only about 50% of the intended beneficiaries of farm loan waivers announced by 9 States since 2014 have actually received debt write-offs. The poorest implementation of farm loan waiver schemes was in Telangana, where only **5% of the eligible farmers** received the announced benefits. **Madhya Pradesh (12%)**, Jharkhand (13%), Punjab (24%), Karnataka (38%) and **Uttar Pradesh (52%)** also did poorly. Farm loan waivers implemented by Chhattisgarh in 2018 and Maharashtra in 2020 were received by 100% and 91% of the eligible farmers, respectively.

Reasons for Poor Implementation of Farm Loan Waiver Scheme

The report identified **rejection of farmers' claims** by state governments, **low fiscal space** to meet promises and **change in government** in subsequent years as the possible reasons for poor implementation of these loan waivers.

Concerns with Loan Waiver Scheme

According to the report, loan waivers destroy the credit culture which may harm the farmers' interest in the long term. The waivers also squeeze the fiscal space of governments to increase productive investment in agriculture infrastructure.

3. Panel on Minimum Support Price (MSP)

News: The Government of India has constituted a committee to look into the issues of Minimum Support Price (MSP), Natural Farming and Crop Diversification.

Terms of Reference of the committee

On MSP: To suggest measures to (a) Make MSP available to farmers by making the systems **more effective** and **transparent**; (b) Give more **autonomy** to Commission for Agricultural Costs and Prices (CACP).

The terms of reference **do not mention legal guarantee on MSP**.

On Natural Farming: To make suggestions for programmes and schemes for value chain development, protocol validation and research for future needs and support for area expansion under the Indian Natural Farming System.

On Crop diversification: To provide suggestions related to crop diversification including; (a) Mapping of existing cropping patterns of agro-ecological zones of producer and consumer states; (b) Strategy for diversification policy to change the cropping pattern according to the changing needs of the country; (c) A system to ensure remunerative prices for the sale of new crops. (Refer EPIC November 2021 for The Issue of Farm MSP).

4. Windfall Tax on Oil Products

News: The Government has reduced the windfall tax on domestically produced crude, diesel and aviation turbine fuel (ATF). It has also withdrawn levy on petrol.

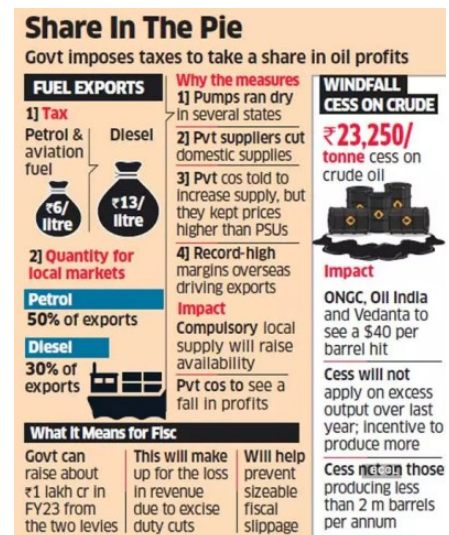
About Windfall Tax

A windfall tax is a higher tax rate on sudden big profits levied on a particular company or industry.

On July 1, the Union government had imposed export duties on petrol, ATF and diesel and imposed a windfall tax on domestic crude production (Rs 23,250 per tonne or US\$ 40 per barrel).

Global crude prices had risen, and domestic crude producers were making windfall gains. Private oil marketing companies were exporting petrol and diesel to foreign countries for better profits. This led to a shortage of fuel at retail outlets as oil marketing companies were not willing to sell the commodity at a loss since domestic prices had not increased despite rising crude and depreciating rupee.

Withdrawal of the Windfall Tax



The price of crude oil in the international markets has fallen on fears of a recession in USA and globally. This has prompted the government to reduce the duties.

5. Trade Related Concerns Raised Against India

News: The World Trade Organization (WTO) has released its annual report. India received highest number of trade related concerns against it.

Key Takeaways from the Report

Trade Related Concerns raised against India:

~35% of the new trade-related concerns in 2021 were raised against various import-related restrictions imposed by India. These issues were raised by countries such as China, Japan, European Union, Indonesia and USA.

Leading Initiators of Anti-dumping measures: India and USA were the leading initiators of anti-dumping probes, accounting for more than 30% of new investigations.

Countries can impose **anti-dumping measures** or duties on imports of a product where the exporting company sends the product at a price lower than its normal value and lower than the price it charges in its home market.

The dumped imports cause or threaten to cause injury to the domestic industry in the importing country.

TRADE CONCERNS BY WTO MEMBERS	
Country raising concern	Subject
Chinese Taipei	India's caustic soda quality control order
EU, Indonesia, Chinese Taipei	India's import policy on tyres
Japan	India's import restrictions on air conditioners
Japan	India's mandatory certification for steel products
United States	India's order related to requirement of non-GM cum GM-free certificate with imported food consignment
Indonesia	India's plain copier paper quality order 2020
Indonesia	India's standards and import restrictions in the automotive sector

Source: WTO annual report, 2022

6. Financial Inclusion Index

News: The Reserve Bank of India has released the Financial Inclusion (FI) Index for FY2021-22

About the FI Index

The aim of the Index is to capture the extent of financial inclusion across the country. The index comprises 3 broad parameters: **Access** (35% weightage), **Usage** (45%) and **Quality** (20%). Each of these parameters consists of various dimensions, which are computed based on 97 indicators e.g., the quality parameter includes aspects such as financial literacy, consumer protection, and inequalities and deficiencies in services.

The index score varies from 0 to 100, where 0 represents complete financial exclusion and 100 indicates full financial inclusion. The index has been constructed without any 'base year'. It reflects the cumulative efforts of all stakeholders.

Key Findings of the Index

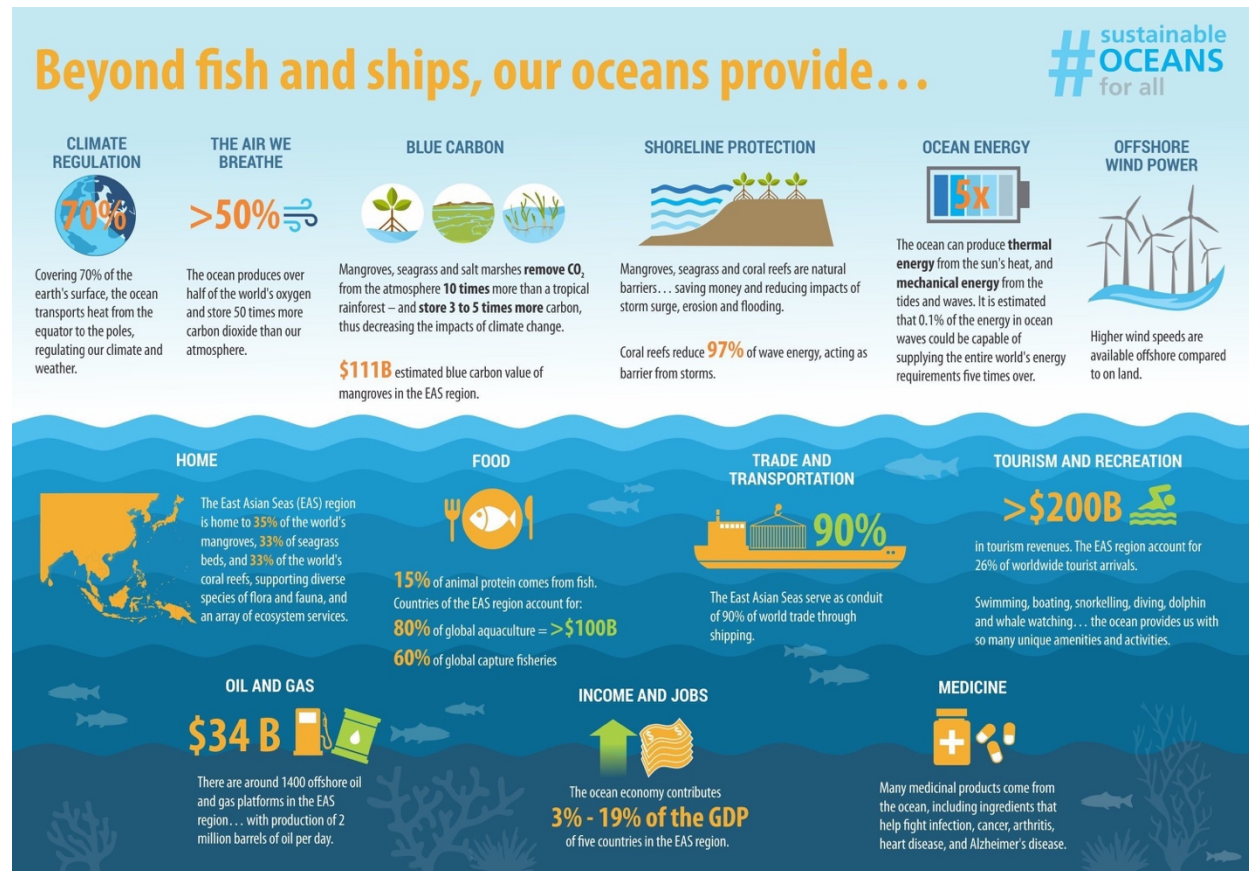
The extent of financial inclusion across the country has increased to 56.4 in March 2022 showing growth across parameters. The index stood at 53.9 in March 2021 and at 43.4 in March 2017. This shows rapid improvement in the reach of financial services over the past 5 years.

7. National Policy on Blue Economy

News: The Ministry of Earth Sciences is finalizing the National Policy on Blue Economy.

About the Blue Economy

Blue economy refers to the multitude of ocean resources available in the country that can be harnessed to aid the production of goods and services because of its linkages with economic growth, environmental sustainability, and national security. According to the **World Bank**, the blue economy is the ‘sustainable use of ocean resources for **economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem**’.



India's Blue Economy

Vast Coastline: India has long coastline of ~7500 kms. 9 Indian States are coastal and there are ~1380 islands. There are 199 ports, including 12 major ports that handle 1400 million tons of cargo each year.

Huge Living and Non-living Resources: India's Exclusive Economic Zone (EEZ) of over 2 million square km has huge living and non-living resources with significant recoverability such as for crude oil and natural gas.

Coastal Communities: The coastal economy sustains over 4 million fisherfolk and coastal communities.

Purpose of the Draft Blue Economic Policy

Focus of the policy: The policy envisages the optimal utilization of all sectors of the maritime domain, (living, non-living resources, tourism, ocean energy, etc.) for sustainable development of coastal areas.

Thematic Areas: The policy focuses on seven thematic areas such as: **(a)** National accounting framework for the blue economy and ocean governance; **(b)** Coastal marine spatial planning and tourism; **(c)** Marine fisheries, aquaculture, and fish processing; **(d)** Manufacturing, emerging industries, trade, technology, services, and skill development; **(e)** Logistics, infrastructure and shipping including trans-shipment; **(f)**

Coastal and deep-sea mining and offshore energy; (g) Security, strategic dimensions, and international engagement.

National Blue Economy Advisory Council (NBEAC): It will comprise Secretaries of relevant Ministries as members. It would also include Chief Secretaries/Principal Secretaries of the Coastal States and other representatives from industry.

8. Bond Yield Curves, Hard/ Soft Landing and Currency Wars

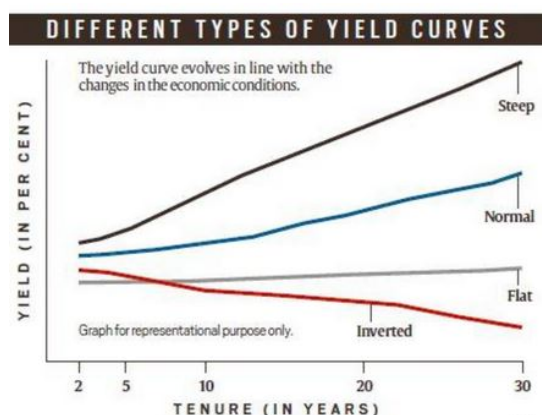
News: The Federal Reserve of USA has been increasing the interest rates. Observers have pointed out that inversion of the Bond Yield Curve in USA will prevent the Fed from achieving a soft landing for the economy.

About the Yield Curve

Bond yield is the return an investor realizes on a bond. Price and yield are inversely related: **As the price of a bond goes up, its yield goes down.**

The yield curve is the graphical representation of yields from bonds (with an equal credit rating) over different time horizons. Under normal circumstances, the yield curve is upward sloping. It means as one buys bonds of longer tenure — one gets higher yields. Moreover, a longer tenure also implies that there is a greater risk of failure.

Inverted Yield Curve: There are times when the bond yield curve becomes inverted e.g., bonds with a tenure of 2 years end up paying out higher yields (returns/ interest rate) than bonds with a 10-year tenure. Such an inversion of the yield curve essentially suggests that **investors expect future growth to be weak.**



Occurrence of Inversion of the Yield Curve

When investors feel buoyant about the economy, they pull the money out from long-term bonds and put it in short-term riskier assets such as stock markets. Due to this, **the prices of long-term bonds fall, and their yield (effective interest rate) rises** (bond prices and bond yields are inversely related).

However, when investors suspect that the economy is heading for trouble, they pull out money from short-term risky assets and put them in long-term bonds. This causes the prices of long-term bonds to rise and their yields fall.

Significance of Inversion Yield Curve

Inversion of the bond yield curve has become **a strong predictor of recessions** if such an inversion lasts for several months.

Soft Landing and Hard Landing

Currently, USA's Federal Reserve is not just reducing the money supply but also increases the cost of money (that is, the interest rate). This is being done to contain soaring inflation. When a central bank is successful in slowing down the economy without bringing about a recession, it is called **soft-landing** — that is, no one gets hurt. But when the actions of the central bank bring about a recession, it is called **hard-landing**.

Currency War

Federal Reserve is aggressively raising interest rates, thus more investors are rushing to invest money in USA. This, in turn, has made the dollar stronger than all the other currencies. On the face of it, this should make all other countries happier because a relative weakness of their local currency against the dollar makes their exports more competitive. In the past, USA has often accused other countries of manipulating their currency (and keeping it weaker against the dollar) just to enjoy a trade surplus against USA. This was also called as the **Currency War**.

Reverse Currency War

It is a situation in which countries are trying to make their currency stronger e.g., at present, every central bank is trying to figure out ways to counter the US Fed and raise interest rates themselves in order to ensure their currency doesn't lose too much value against the dollar. Stronger currency means that imports are relatively cheaper. However, raising the interest rate will decrease the chances of soft-landing for these economies. (Refer EPIC July 2022 for Fall in the Value of Rupee).

9. Global Employment Trends for Youth, 2022 Report

News: The International Labour Organization (ILO) has released the report which provides update on key labour market indicators and trends.

Key Findings of the Report on India:

The youth employment participation rate declined by 0.9% points over the first nine months of 2021 relative to its value in 2020. The situation is particularly severe for very young people aged 15-20 years

Online Education: The school closures in India lasted 18 months. Among 24 crore school-going children, **only 8% of children in rural areas** and 23% in urban areas had adequate access to online education.

Female Labour Market: India has a very low youth female labour market participation and Indian young women experienced **larger relative employment losses** than young men in 2021 and 2022.

High Informal Sector: Domestic work is a highly informal sector in India and wages are extremely low and young women and girls are vulnerable to abuse.

10. Counterfeit Currency in the Banking System

News: The Union Minister for Finance has informed the Lok Sabha about the counterfeit currency in the banking system.

Trend of Counterfeit Currency in the Banking System

The value of counterfeit currency (Fake Indian Currency Notes, **FICN**) in the banking system reduced from INR 43.47 crore in 2016-17 to about INR 8.26 crore in 2021-22, amounting to a decline of more than 80%. The decline came after the Union Government decided to cancel the legal tender status of INR 1,000 and INR500 denomination currency notes in 2016.

Steps taken by the Government

Terror Funding and Fake Currency Cell in the National Investigation Agency (NIA) has been constituted to conduct a focused investigation of terror funding and fake currency cases.

The government has set up an **FICN Coordination Group** to share intelligence and information with the security agencies in states and the centre.

A **Joint Task Force** is functioning between India and Bangladesh for building trust and cooperation for the exchange and analysis of information on smugglers of FICN.

The government conducts **capacity-building programmes** for various law enforcement agencies at the Union and State level. Training programmes are held for the police officers of Nepal and Bangladesh to sensitise them about the smuggling/counterfeiting of Indian currency.

11. Revival Package for BSNL

News: The Union Cabinet has approved a revival package for BSNL amounting to INR 1.64 Lakh Crore.

Key Aspects of BSNL's Revival Package

Upgrading BSNL Services -

Administrative allotment of Spectrum: To improve existing services and provide 4G services, BSNL will be allotted Spectrum in the 900/1800 MHz band. With this, BSNL will be able to compete in the market and provide high-speed data using their vast network including in rural areas.

Financial support for capex: Government will fund capital expenditure to BSNL for the deployment of indigenous 4G stack.

Viability gap funding for rural wireline operations: Despite the commercial non-viability, BSNL has been providing wireline services in rural/remote areas to meet the social objectives. The government will provide funds to BSNL as viability gap funding for commercially unviable rural wire-line operations done during 2014-15 to 2019-20.

De-stressing the BSNL balance sheet -

Debt structuring: Government will provide a sovereign guarantee to BSNL and MTNL for raising long-term loans. This will help restructure existing debt and de-stressing the balance sheets.

Financial support for AGR dues: To further improve the balance sheet, Adjusted Gross Revenue (AGR) dues of BSNL will be settled by conversion into equity.

Augmenting BSNL Fibre Network -

Merger of BBNL and BSNL: To facilitate wider utilization of infrastructure laid under BharatNet, Bharat Broadband Network Ltd (BBNL) will be merged with BSNL. The infrastructure created under BharatNet will continue to be a national asset, accessible on a non-discriminatory basis to all the Telecom Service Providers.

International Relations

1. Mineral Security Partnership

News: 11 nations have come together to establish the Mineral Security Partnership.

About the Partnership

It is a US-led partnership to secure supply chains of critical minerals, aimed at reducing dependency on China. Its aim is to catalyze investment from governments and the private sector to develop strategic opportunities. It has also been described as '**metallic NATO**'.

There are 11 partner countries: the US, Canada, Japan, Germany, France, UK, Finland, Norway, Sweden, Korea, Australia along with the European Commission.

All countries have certain domain capabilities like some of the countries are **geologically well endowed**, some are **players in mining**, some have strengths in refining, processing and trading of minerals, and some lead the R&D on metallurgy for alternatives. According to experts, the reason India would not have found a place in the MSP grouping is because **India does not bring any expertise to the table**.

The MSP will focus on the supply chains of minerals such as Cobalt, Nickel, Lithium, and also the **17 'rare earth' minerals**. The alliance is also seen as primarily focused on evolving as an alternative to China, which has created processing infrastructure in rare earth minerals and has acquired mines in Africa for elements such as Cobalt.

The Mineral Security Partnership has the potential to influence future investments, technological development, and trade flows in energy raw materials. (Refer EPIC July 2020 for Rare Earth Elements).

2. India-ASEAN Friendship Year

News: The year 2022 marks 30 years of ASEAN-India relations and it has been designated as **ASEAN-India Friendship Year** by the leaders in October 2021.

About India-ASEAN partnership

India began formal engagement with ASEAN in 1992 as a “**Sectoral Dialogue Partner**” (and subsequently as a “**Dialogue Partner**” in 1996. The initial years as a Dialogue Partner (DP) entailed interaction at the Foreign Minister level which was further upgraded to the **Summit level in 2002**, when the first such Summit level meeting was held. At the commemorative Summit meeting in Delhi (December 2012) the dialogue partnership was further elevated to **strategic partnership**. At the 25-year Commemorative Summit (2018), India and ASEAN agreed to **build cooperation in the maritime domain**. On October 28, 2021 Prime Minister co-chaired the 18th India-ASEAN Summit with Sultan Haji Hassanal Bolkiah of Brunei, the current Chair of ASEAN. The summit was held virtually and saw participation from the Leaders of the ASEAN member states.

India-ASEAN friendship is seminal in order to **promote decentralized globalization** and ensure **resilient and reliable supply chains**, needed by the international community. The partnership between the two can play a moderating influence on the “**geopolitical headwinds**” triggered by events such as Russia-Ukraine crisis, and its knock-on effects on food, energy security, prices of fertilisers and commodities, as well as logistics and supply chains. Both sides have established an **ASEAN-India Project Management Unit** at the ASEAN Secretariat in Jakarta, as part of the efforts to strengthen effective utilisation, management and execution of the joint programmes/projects funded through **ASEAN-India Fund** and the **ASEAN-India Green Fund**. Further, India and ASEAN are imparting greater focus on trade and investment growth, physical and digital connectivity, defence and security, climate action and green growth.

Science and Technology

1. Russia to Withdraw from the International Space Station (ISS)

News: Russia has announced that it will quit the ISS after 2024.

About the International Space Station (ISS)

International Space Station (ISS) is a space station located in **low Earth orbit**. It is a joint project between 5 space agencies: **NASA** (United States), **Roscosmos** (Russia), **JAXA** (Japan), **ESA** (Europe) and **CSA** (Canada).

ISS has been in orbit around Earth since 1998 and has been used to conduct thousands of scientific experiments. It is approved to operate until 2024, but the US wants to extend that for 6 more years till 2030.

Russia has decided to quit ISS as relations have soured since the Ukraine war.

Impact of Russia leaving the ISS

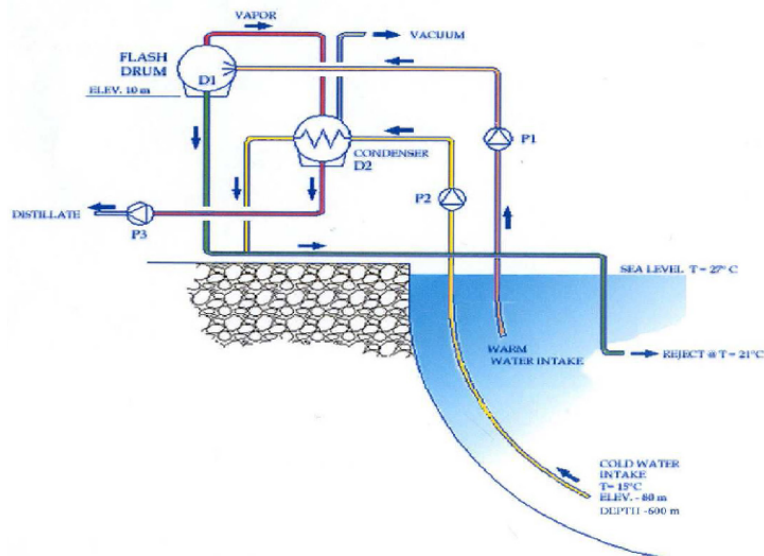
ISS is designed in a way that makes the partners dependent on each other. For instance, the US provides the power; Russia provides the propulsion and keeps the platform from falling to Earth. If that propulsive capability is withdrawn, the US and its other partners will need to devise other means of periodically boosting the station higher in the sky.

2. Low-Temperature Thermal Desalination (LTTD) and OTEC

News: The National Institute of Ocean Technology (under the Ministry of Earth Sciences) has developed and demonstrated the Low-Temperature Thermal Desalination Technology in Lakshadweep Islands.

About the Technology

It is a **desalination technique** (removing salt from seawater) for converting seawater to potable water. It works on the principle that ocean water at the depth of 1,000–2,000 feet is about 4°–8°C cooler than surface water. Salty surface water is collected in a tank and subject to high pressure (via an external power source). This pressured water vaporizes and is trapped in tubes or a chamber. Cold water plumbed from the ocean depths is passed over these tubes and the vapour condenses into fresh water and the resulting salt is diverted away.



Advantages of the LTTD Technique

The LTTD technology does not require any chemical pre- and post-treatment of seawater and thus the **concerns related to pollution are minimal**. It is suitable for island territories. Since no effluent treatment is required, the process requires less operational maintenance compared to other desalination processes.

3. Ocean Thermal Energy Conversion (OTEC)

News: The National Institute of Ocean Technology is establishing an Ocean Thermal Energy Conversion Plant with a capacity of 65KW in Kavaratti, Lakshadweep.

About the Ocean Thermal Energy Conversion (OTEC)

It is a process for producing energy by harnessing the temperature differences (thermal gradients) between ocean surface waters and deep ocean waters. Especially in tropical regions, surface water is much warmer than deep water because of the solar radiation. The **temperature difference can be used to produce electricity and desalinate ocean water**. OTEC systems use a temperature difference (of at least 77°F) to power a turbine to produce electricity.

Working of OTEC Plant

Warm surface water is pumped through an evaporator containing a working fluid. The vaporized fluid drives a turbine/generator. The vaporized fluid is turned back to a liquid in a condenser cooled with cold

ocean water pumped from deeper into the ocean. OTEC systems use seawater as the working fluid and can use condensed water to produce desalinated water (LTTD described above).

Advantages of OTEC

(a) It produces clean environmentally friendly renewable energy; (b) OTEC can produce energy at all times, unlike solar and wind plants which are dependent on external conditions.

Disadvantages of OTEC

The disadvantages are that a) It is economically expensive and b) It only works in a few regions of the world as the required temperature difference is only present in tropical waters.

4. Internet in India: IAMAI Report

News: The Internet and Mobile Association of India (IAMAI) has released the report 'Internet in India'.

Key Findings of the Report

Active Internet Users in India: At present, there are a total of 692 million active internet users in India; 351 million from rural and 341 from urban India. The number is expected to rise to 900 million by 2025.

Online Transactions: Around 346 million Indians are engaged in online transactions including e-commerce and digital payments. This was largely driven by the COVID-19 pandemic, which sparked a 51% increase in digital transactions in 2 years.

Top Activities: Use of social media, entertainment and communications are the top three activities in which internet users are engaged across India.

State-wise: In terms of states, Goa has the maximum Internet penetration while Bihar has the lowest.

Not adopted Internet yet: Around **762 million Indians have not adopted the Internet yet** — including 63% from rural pockets of the country. 'Difficulty to understand the Internet' continues to be the primary deterrent along with lack of awareness, especially in rural India.

5. AlphaFold

News: DeepMind, a company owned by Google has announced that it has predicted the 3-Dimensional structures of more than 200 million proteins using AI-based tool, AlphaFold

About AlphaFold

AlphaFold is an AI-based protein structure prediction tool. It is based on a computer system called deep neural network. (Refer EPIC February 2022 for Artificial Neural Network, ANN).

It uses processes based on 'training, learning, retraining and relearning'. By using this method, AlphaFold has now predicted the structures of the entire 214 million unique protein sequences deposited in the Universal Protein Resource (UniProt) database.

Implications

Proteins carry out all the functions inside a living cell. Therefore, knowing protein structure and function is **essential to understanding human diseases**. Scientists predict protein structures using x-ray crystallography, nuclear magnetic resonance spectroscopy, or cryogenic electron microscopy. These techniques are **time-consuming**, often take years and are based mainly on trial-and-error methods. Therefore, the development of AlphaFold is a watershed movement in science and structural biology in particular.

AlphaFold is neither flawless nor the only AI-based protein structure prediction tool.

RoseTTaFold, developed at the University of Washington in Seattle, U.S., is another tool. Although less accurate than AlphaFold, it can predict the structure of protein complexes.

6. India's 75 Years of Scientific Advancements

News: Indian Scientists have achieved a lot in the 75 years since Independence.

About India's 75 years of scientific advancements

Since 1947, the country has **emerged as a global power in space technology, nuclear power**, and many other fields. India's **probes to the moon and Mars, nuclear weapons, and strategic missile systems** are praiseworthy achievements.

Along with that India also achieved **self-sufficiency in foodgrain, medicines, and vaccines**, and **exemplary developments in communications and information technology**.

Innovation: In the latest Global Innovation Index 2021, India ranked 46 among 132 countries. India over-performed on innovation relative to its level of development for the 11th year in a row.

Agriculture: In 2021-22, India's farm exports touched a record US\$ 50.21 billion. India is among the 15 leading exporters of agricultural products.

'Pharmacy of the world': Indian firms supply affordable drugs and vaccines to developing and developed countries. India's successful vaccination drives; against smallpox, polio, Covid, besides the ongoing Mission Indradhanush, are prime examples of Indians' trust in modern sciences.

IT industry and telecom revolution: Services firms in India are targeting record US\$ 350 billion exports in the current financial year, up 37%, year-on-year, despite global slowdown.

Factors behind India's Success

Planning Commission: The Planning Commission was set up in 1950 and the first plan draft, presented in July 1951, included a chapter on 'Scientific and Industrial Research'. The chapter recognised 11 research institutes at the national level in a bid to lay the foundation of scientific research in the country.

Scientific Policy Resolution, 1958: It is India's first major science policy.

Green Revolution: It was based on 1958 policy. It was achieved through research on high-yielding wheat and rice varieties, fertilisers, and advanced farming techniques.

IT and Telecom policy: India allowed domestic software firms to become globally competitive in the 1990s. This is the foundation of Digital India and associated socio-economic development.

Further Steps

Invest in R&D: According to a study by the NITI Aayog and the Institute for Competitiveness, India has among the lowest research and development (R&D) expenditures. Its R&D spending has decreased from 0.8% of GDP in 2008-09 to 0.7% in 2017-18. Hence, India needs further investment and technological development to fulfil its missions.

7. Monkey Pox: Public Health Emergency Declared by the WHO

News: The World Health Organization has declared Monkeypox as a Public Health Emergency of International Concern (PHEIC).

About Monkeypox

Monkeypox belongs to the **orthopoxvirus**, which is a genus of viruses that also includes the variola virus which causes **smallpox**.

It is an enveloped **double-stranded DNA virus**, unlike the RNA virus. This makes it far more stable and less prone to rapid mutations.

There are two distinct genetic clades of the monkeypox virus: the central African (Congo Basin) clade and the West African clade. The Congo Basin clade has historically caused more severe disease and was thought to be more transmissible.

Vaccines against Monkeypox

There is no dedicated monkeypox vaccine. Vaccinations against smallpox were found to be 85% effective in preventing smallpox, a disease eradicated in 1980.

In 2019, the United States Food and Drugs Administration (FDA), approved the **JYNNEOS Vaccine** for the prevention of smallpox, monkeypox and other diseases caused by orthopoxviruses in adults 18 years of age and older and categorized as having a high risk of infection.

JYNNEOS Vaccine contains a **live vaccinia virus** that does not replicate efficiently in human cells. The vaccinia virus is the smallpox virus but is made incapable of replicating within the body.

It is administered as two injections 28 days apart. The immune response takes 14 days after the second dose.

Public Health Emergency of International Concern (PHEIC)

It is the WHO's highest alert level. It is part of the international health regulations (IHR) which have been the governing framework for global health security since 2007.

Definition: The WHO defines PHEIC as an extraordinary event which is determined to constitute a public health risk to other states through the international spread of disease and potentially requires a coordinated international response.

The WHO reserves the designation for only those diseases that need a coordinated international response to prevent them from potentially escalating into a pandemic.

Environment

1. Amendments to Environment Impact Assessment (EIA) Rules

News: The Ministry of Environment, Forests and Climate Change has notified amendments to the EIA Rules, making several exemptions for certain projects.

Exemptions notified by Ministry

Highway projects of strategic and defence importance: The amendment exempts Highway projects of strategic and defence importance, which are 100 km from the Line of Control, among other locations, from an environmental clearance before construction.

Biomass-Based Thermal Power Plants: Thermal power plants up to 15 MW based on biomass or non-hazardous municipal solid waste using auxiliary fuel such as coal, lignite or petroleum products up to 15% have also been exempted — as long as the fuel mix is eco-friendly.

Fish Handling Ports and Harbour: Fish handling ports and harbours with less pollution potential compared to others, and catering to small fishermen, are exempted from environmental clearance.

Toll Plazas: Toll plazas that need more width for installation of toll collection booths to cater to a large number of vehicles, and expansion activities in existing airports related to terminal building expansion without an increase in the airport's existing area, rather than expansion of runways, etc., are two other projects exempted. (Refer EPIC February 2022 for Star Rating System and the EIA).

2. The Supreme Court's Judgment on Aravalli Hills

News: The Supreme Court has declared that all land in Haryana covered under the Punjab Land Preservation Act will be treated as forest land.

Significance of the Judgment

The verdict will protect the **Aravalli ranges, one of the oldest mountain blocks in the world**. The range also acts as the barrier against **desertification of the breadbasket of India**. The verdict has upheld the **3 decades of jurisprudence** on the Aravalli range, which is a key feature of the National Capital Region (NCR). The ruling will end the **destruction of the Aravalli range**, by the real estate sector. This is validated by the fact that the 3 states **Haryana, Rajasthan, and Uttar Pradesh**, which form part of the NCR, have significantly lower forest cover than the national average of 21.7%. Further, Haryana is the lowest at 3.6%.

The destruction of Aravalli Hills has already extracted a **large economic and health cost in the NCR**. In 2013, the World Bank estimated that environmental destruction cost **India's economy** US\$ 80 billion or 5.7% of the GDP (annual). Major cost was on **account of pollution** as it results in a significant **mortality load** among adults.

3. New Ramsar Sites in India

News: India has added 26 new Ramsar sites or Wetlands of International Importance. The number now has increased to 75.

India's Ramsar Sites

India's Ramsar sites are spread over 11,000 sq km; ~10% of the total wetland area in the country, across 18 States. No other South Asian country has as many Ramsar Sites as India.

The National Wetland Inventory and Assessment compiled by the ISRO estimates India's wetlands to span around 1,52,600 square kilometres which is 4.63% of the total geographical area of the country.

About the new Ramsar Sites

Pallikaranai Marsh Reserve Forest (Tamil Nadu): It is a freshwater marsh located in Chennai;

Karikili Bird Sanctuary (Tamil Nadu): It is located in the Kancheepuram District of Tamil Nadu.

Pichavaram Mangrove (Tamil Nadu): It is located in a village near Chidambaram in the Cuddalore District of Tamil Nadu.

Vembannur Wetland Complex (Tamil Nadu): It is a human-made inland tank, believed to have been constructed in the regime of Pandyan king Veeranarayana. This wetland is also an Important Bird and Biodiversity Area (IBA).

Vellode Bird Sanctuary (Tamil Nadu): It forms part of the Central Asian Flyway.

Koonthankulam Bird Sanctuary (Tamilnadu): It is a man-made wetland. It is also an important Bird and biodiversity area (IBA) forming part of the Central Asian Flyway.

Vedanthangal Bird Sanctuary (Tamil Nadu): It is comprised of freshwater water and is an Important Bird and Biodiversity Area (IBA). It belongs to the Coromandel Coast biotic province.

Udhayamarthandapuram Bird Sanctuary (Tamil Nadu): It is one of the important bird sanctuaries in Tamil Nadu. This site stores floodwaters during monsoon overflow and maintains surface water flow during drier periods.

Gulf of Mannar Marine Biosphere Reserve (Tamil Nadu): It is located on the south-eastern coastline of India and is a unique marine environment rich in biodiversity. It is the first Marine Biosphere Reserve in South & South-East Asia.

Chitrangudi Bird Sanctuary (Tamil Nadu): It has been a protected area since 1989 and has been an ideal habitat for winter migratory birds.

Suchindrum Theroor Wetland complex (Tamil Nadu): It is a part of Suchindrum-Theroor Manakudi Conservation Reserve. It is declared an Important Bird Area and lies at the southern tip of the Central Asian flyway of migratory birds.

Vaduvur bird sanctuary (Tamil Nadu): It is a large human-made irrigation tank and shelter for migratory birds as it provides a suitable environment for food, shelter, and breeding ground.

Kanjirankulam Bird Sanctuary (Tamil Nadu): It is notable as a nesting site for several migratory heron species that roost in the prominent growth of babul trees there.

Pala wetland (Mizoram): It is the largest natural wetland in Mizoram.

Sakhya Sagar Lake (Madhya Pradesh): It is part of the Madhav National Park in Shivpuri, MP.

Sirpur Wetland (Madhya Pradesh): It is a historical wetland situated in Indore, Madhya Pradesh.

Yashwant Sagar (Madhya Pradesh): It is an Important Bird Area and is used for water supply to the city of Indore.

Satkosia Gorge (Odisha): It is located in river Mahanadi. It is the meeting point of two biogeographic regions of India; the Deccan Peninsula and the Eastern Ghats.

Tampara Lake (Odisha): It is among the most prominent freshwater lakes in Odisha.

Hirakud Reservoir (Odisha): It is the largest earthen dam in Odisha started operating in 1957. The reservoir provides important hydrological services by moderating floods in the Mahanadi delta.

Ansupa Lake (Odisha): It is the largest freshwater lake in Odisha. It is an oxbow lake formed by River Mahanadi.

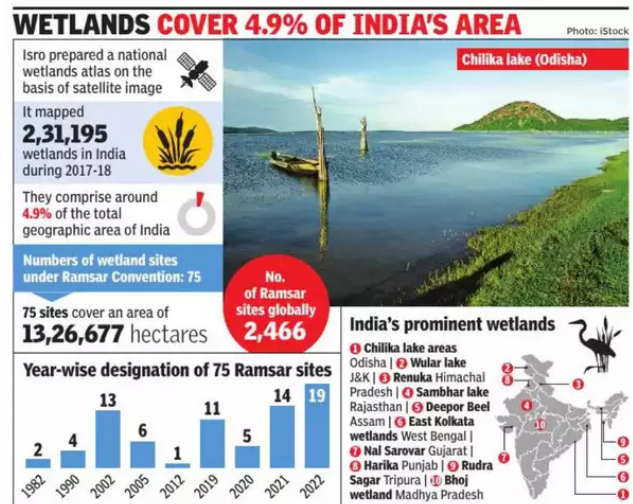
Nanda Lake (Goa): The majority of the lake is intermittent freshwater marshes that lie adjacent to one of the major rivulets of the Zuari River.

Ranganathittu Bird Sanctuary (Karnataka): It is an Important Bird Areas in Karnataka (listed by the Bombay Natural History Society).

Thane Creek (Maharashtra): It is fed freshwater primarily by Ulhas River. It is fringed by mangroves on both banks & comprises around 20% of the total Indian mangrove species.

Hygam Wetland (Jammu and Kashmir): It falls within the river Jhelum basin and plays a significant role as a flood absorption basin, biodiversity conservation site, eco-tourism site and livelihood security for the local communities. It is also recognized as an Important Bird Area (IBA).

Shallabug Wetland Conservation Reserve (Jammu and Kashmir): Large areas of the wetland dry up between September and March.



4. N-treat Technology by IIT Bombay: In-situ Treatment of Sewage

News: The Brihanmumbai Municipal Corporation (BMC) has planned an in-situ treatment of sewage from the drains to **prevent sludge and sewage from drains flowing into the sea.**

About the N-Treat Technology

N-Treat is a 7-stage process for waste treatment that uses screens, gates, silt traps, curtains of coconut fibres for filtration, and disinfection using sodium hypochlorite.

1st stage: It involves **screening** to prevent the entry of floating objects such as plastic cups, paper dishes, polythene bags, sanitary napkins, or wood.

2nd stage: It includes a **silt trap** which creates an inclination and 'parking spot' on the bed for sedimentation.

Next three stages (3-4-5): These are the installation of '**bio zones**' in the form of coconut fibre curtains that will act as filters and promote the growth of biofilm to help in the decomposition of organic matter.

6th stage: It consists of a **floating wetland with aquatic vegetation** planted on floating mats. In the floating wetlands, plants acquire nutrition directly from the water column for their growth and development, thus reducing the organic as well as inorganic pollutants.

7th stage: It will include **disinfection** using sodium hypochlorite to kill the bacteria in water.

Advantages of the Technology

It is a natural and environmentally friendly way for sewage treatment.

Its setup takes place within the nullah channels, that is through the in-situ or on-site method of treatment and does not require additional space.

5. Clean, Healthy Environment as Universal Human Right: UN

News: The United Nations (UN) has passed a resolution declaring that every person has the right to live in a clean, healthy environment.

About the Resolution on Right to a Clean and Healthy Environment

This resolution has been passed by over 160 UN member nations including India. It is **not a legally binding resolution**. The resolution recognizes the right to a clean, healthy and sustainable environment as a human right essential for the full enjoyment of all other human rights.

It calls upon States and international organizations to adopt policies and scale up efforts to ensure a clean, healthy and sustainable environment for all.

Significance of the Resolution

The Right to a clean and healthy environment is not included in the Universal Declaration of Human Rights, 1948. So, this is a historic resolution that will change the very nature of international human rights law.

The resolution will also empower people, especially those in vulnerable situations including environmental human rights defenders, children, youth, women and indigenous people.

Issues with the Resolution

The words 'clean', 'healthy' and 'sustainable' lack an internationally agreed definition. The resolution text also fails to refer to the foundational principle of equity in international environmental law.

6. UN Guidelines for Children Displaced by Climate Change

News: The UN-backed agencies have released 'The Guiding Principles for Children on the Move in the Context of Climate Change'. It is first policy framework to protect children displaced by climate change.

Impact of Climate Change on Children

1 billion children, ~50% of the world's 2.2 billion children, live in 33 countries classified as being at extremely high risk of the impacts of climate change. Nearly 10 million children were displaced following weather-related shocks in 2020 alone.

Children who move in the context of climate change may be exposed to a **variety of risks such as abuse, trafficking, exploitation and other forms of maltreatment**. They may **lose access to education, be forced into labour and endure poor living conditions**. There also remain many unmet protection needs.

Guidelines for Children

These guidelines are a joint initiative of the International Organization for Migration (IOM), UN Children's Fund (UNICEF), Georgetown University, and the United Nations University. The guidelines are a set of 9 principles that address the unique vulnerabilities of children who have been uprooted. The guidelines cover both internal as well cross-border migrations.

The nine principles are: **(a)** Rights-based approach; **(b)** Best interests of the child; **(c)** Accountability; **(d)** Awareness and participation in decision-making; **(e)** Family unity; **(f)** Protection, safety, and security; **(g)** Access to education, health care, and social services; **(h)** Non-discrimination; **(i)** Nationality.

7. Climate Change and Weather Forecasting

News: The Director-General (DG) of Indian Meteorological Department (IMD) has said that climate change has hampered the ability of forecasting agencies to accurately predict severe events. The IMD is installing more radars and upgrading its systems to meet the challenge.

Observations by IMD DG

Climate change has **increased the instability in the atmosphere**. This leads to an increase in convective activity: thunderstorms, lightning and heavy rainfall. The severity of cyclones in the Arabian Sea is rising.

Long term trends of precipitation are changing. Parts of North, East and Northeast India show a decrease in rainfall, while some areas in the West, such as west Rajasthan, show an increase.

Monsoon: Uttar Pradesh, Bihar, West Bengal, Meghalaya and Nagaland had shown significant decreasing trends in the southwest monsoon rainfall during the recent 30-year period (1989-2018).

Cloud bursts: A study by the Indian Institute of Tropical Meteorology, MoES says the frequency of mini-cloud bursts (5 cm or more rainfall in an hour) is increasing in the Himalayas.

Reason for intense rainfall: Studies have proved that this increase in heavy rainfall events and decrease in light precipitation is due to climate change.

Climate change has **increased the surface air temperature**, which in turn has **increased the evaporation rate**. Since warmer air holds more moisture, it **leads to intense rainfall**.

Improving Weather Forecasts

IMD's forecast accuracy had improved by about 30%-40% for severe weather events such as cyclones, heavy rain, thunderstorms, heat waves, cold waves and fog in the past 5 years due to an **improvement in the observational network, modelling and computing systems**.

The IMD is bolstering its observational network with the augmentation of radars, automatic weather stations and rain gauges and satellites to improve predictability. IMD has put up 6 radars in the Northwest Himalayas and 4 more will be installed this year. *Radars are preferred because they have a higher resolution and can provide observations every 10 minutes.*

Ministry of Earth Sciences (MoES) also plans to upgrade its high-performance computing system from a capacity of 10 petaflops at present to 30 petaflops in the next 2 years. This will help assimilate more data into the model that can then be run at higher resolutions.

IMD-MoES weather modelling system has a resolution of 12 km. The target is to make it 6 km. Similarly, the resolution of the regional modelling system will be improved from three kilometres to one kilometre.

8. New Alternative Technologies to Reduce Carbon Emissions

News: Scientists world over have been developing several new low-carbon technologies to cut CO₂ emissions.

Development of New Alternative Technologies

Paper Industry: Paper Industry produces 0.9 billion tonnes of CO₂ a year. Scientists have invented a **gadget that sucks the ink off printed paper, so each sheet can be used 10 times over**. This is expected to reduce demand of paper and reduce emissions by the paper industry.

Steel Industry: Globally, the steel industry emits almost three billion tonnes of CO₂ gas a year, roughly equal to India's annual emissions. A multinational steel manufacturer SSAB (Sweden) has developed the World's first **zero-carbon dioxide steel**. In this method, **steel is produced from the use of renewable power** (wind turbines or hydroelectricity) instead of coal. Instead of producing CO₂ as a by-product, the reaction with hydrogen and iron produces only H₂O (water).

Cement Industry: The cement industry produces 2.5 billion tonnes of CO₂ a year. A rail firm is building a viaduct in England made from a sandwich of cement and steel. This smart design allows less material to be used by harnessing the different physical properties of the cement and steel. This innovation cuts materials costs and **halves the CO₂ emissions** compared to more traditional construction.

Plastic Industry: The plastic industry produces 1.8 billion tonnes of CO₂ a year. In the Netherlands, a biochemical firm Avantium is claiming to have created a **plant-based plastic** (derived from wheat and corn) to rival PET, (polyethylene terephthalate) which is used to make most drinks bottles. The **new product is called PEF (polyethene furanoate)** and is said to produce ~33% fewer emissions than PET.

9. India's New Climate Targets (INDCs)

News: The Union Government has revised India's INDCs (Intended Nationally Determined Contributions) under the Paris Agreement.

About the Climate pledge to the Paris Agreement

According to the 2015 Paris Agreement, each nation must set its own climate goals, which must be gradually modified every few years with increasingly challenging ones. In 2015, just before the Paris Agreement was finalized, India submitted its first pledge. It had 3 primary targets: **(a)** A minimum 40% of all energy generation must come from non-fossil renewable sources; **(b)** A reduction of 33% to 35% in emissions intensity (or emissions per unit of GDP) below 2005 levels; **(c)** Create an additional (cumulative) carbon sink of 2.5-3 gigatonnes of carbon dioxide equivalent (GtCO₂e) by 2030 through additional forest and tree cover.

Commitments made at Glasgow: In 2021, the Indian Prime Minister announced the following new five-point set of targets at COP 26 in Glasgow.

However, only two of these targets have been made official and put in the updated NDC. These are: **(a)** India will now reduce its emission intensity by at least 45%, instead of just 33 to 35%, from 2005 levels by 2030; **(b)** It would also ensure that at least 50% of its total electricity generation, not just 40%, would come from renewable sources by 2030. (Refer EPIC November 2021 for Climate Change, COP26 and Climate Negotiations).

PRIME MINISTER'S PANCHAMRIT ANNOUNCED IN GLASGOW

Promise	Whether included in new NDC
Non-fossil fuel electricity installed capacity to reach 500 GW	Not included
At least 50 per cent of total installed electricity generation capacity to come from non-fossil fuel sources	Included
Reduction of one billion tonnes of carbon dioxide equivalent from cumulative projected emissions between now and 2030	Not included
At least 45 per cent reduction in emission intensity of GDP by 2030	Included
Net zero status by 2030	Never intended to be part of NDC

History, Art and Culture

1. Comic Book on Tribal Freedom Fighters

News: The Ministry of Culture has released the 3rd comic book on stories of 20 tribal freedom fighters at the *Tiranga Utsav* celebration in New Delhi.

Important Tribal Freedom Fighters mentioned in the Book

Tribal Freedom Fighter	Contribution
Tilka Majhi	He rebelled against the atrocities of the British East India Company. He mobilised the Pahadia tribe to which he belonged and raided the Company treasury. He was hanged.
Budhu Bhagat	He had led guerrilla warfare against the British. He was a leader of the Larka rebellion in 1832 .
Sidhu and Kanhu Murre	They were the leaders of the Santhal rebellion (1855–1856) , the rebellion in present-day Jharkhand and Bengal in eastern India against both the British colonial authority and the corrupt zamindari system.
Ramji Gond	He belonged to the Gond tribe. He rose against the wealthy landlords who oppressed the poor with the support of the British. He was caught and hanged.
Telanga Kharia	He refused to accept the tax system of the British and their governance. He insisted that they follow their traditional method of self-governance and organized raids on the treasury. He was betrayed and shot dead.
Tantiya Bhil	He was known as the Robin Hood of the Central Provinces . He robbed trains carrying British wealth and distributed it among his tribe, the Bhils.
Major Paona Brajabasi	He fought to defend the kingdom of Manipur and was the hero of the Anglo-Manipur war .
Malati Mem	She was inspired to join Mahatma Gandhi's satyagraha movement. She fought against the British monopoly over opium and educated her people about the dangers of opium addiction.
Helen Lepcha	She was an ardent follower of Mahatma Gandhi. Her influence over her people made the British restless. In 1941, she helped Netaji Subhas Chandra Bose escape from house arrest and travel to Germany. She was awarded the Tamra Patra for her invaluable contribution to the freedom struggle.
Pulimaya Devi Podar	She heard Gandhi when she was in school and wanted to join the freedom struggle immediately. Despite stiff opposition from her family, she joined the movement. She was imprisoned for her participation in protests. After independence, she continued to serve her people and was awarded the title of ' Swatantra Sainani '.

2. National Flag: Contribution of Pingali Venkayya

News: The Ministry of Culture organized '*Tiranga Utsav*' to celebrate the contributions of Pingali Venkayya on occasion of his 146th Birth Anniversary. A commemorative postal stamp in his honor was also released.

About Pingali Venkayya

He was a freedom fighter, **designer of India's National Flag** and a follower of Gandhian principles. He was born on 2nd August 1876 into a Telugu family in Bhatlapenumarru, Madras Presidency, British India (today's

Machilipatnam in Andhra Pradesh). He was also known as **Patti Venkayya** because of his research into Cambodia Cotton.

Contribution to National Flag

Venkayya designed several models of national flag starting from the one designed in 1921 which was approved by Mahatma Gandhi at a Congress meeting in Vijayawada.

This version consisted of two red and green bands; the **two bands represented the two major religious communities** – the Hindus and the Muslims. The flag also had a charkha which represented Swaraj. On the advice of Mahatma Gandhi, Venkayya added a white band which represented peace.

In 1931, concerns were raised about the religious aspect of the flag. Keeping that in mind, a Flag Committee was set up. The committee replaced the red with saffron and changed the order of the colours with saffron on top followed by white and then green. The charkha was placed on the white band in the middle.

The colours now stood for qualities and not communities; the saffron for courage and sacrifice, white for truth and peace and green for faith and strength. The charkha stood for the welfare of the masses.

Post-Independence, a national flag committee under President Rajendra Prasad replaced the charkha with the Ashok Chakra.

3. Kali Bein River

News: The Chief Minister of Punjab reportedly fell ill after drinking water from the Kali Bein river.

About Kali Bein

Kali Bein is a holy rivulet (a small stream) in Punjab. The rivulet starts from Hoshiarpur district, runs across four districts and **meets the confluence of the rivers Beas and Sutlej** in Harike Pattan (Ramsar Wetland). Along its banks are around 80 villages and half a dozen small and big towns. Wastewater as well as industrial waste used to flow into the rivulet turning its waters black, hence the name Kali Bein (black rivulet). It has been rejuvenated by the efforts of Balbir Singh Seechewal (Seechewal Model).

Religious Significance of Kali Bein

The Kali Bein is of great significance to the Sikh religion. The first Guru, Nanak Dev, is said to have gotten enlightenment here. He is said to have disappeared into the waters and emerged after 2 days. After the enlightenment, he gave the 'Mool Mantra' of the Sikh religion.

Miscellaneous

1. Slow Melting of Karakoram Glaciers

News: The Glaciers of Karakoram Range are melting at a slower pace compared to glaciers in other regions. Scientists are undertaking studies to find the reasons.

About the Lower Pace of Melting in Karakoram

Himalayan glaciers are vital for the water security in the Indo-Gangetic Plains. However, under the effects of global warming, they are rapidly disappearing and might cause acute water crisis in the coming decades. On the other hand, the **glaciers in central Karakoram have surprisingly remained the same or even slightly risen** during the past few decades. This behaviour seems to be **confined to a very small region** with only the **Kunlun ranges** being another example of showing similar trends in the whole Himalayas.

Reasons for the anomalous behaviour

Researchers have claimed that the **recent revival of western disturbance** has been instrumental in triggering and sustaining 'Karakoram Anomaly'. The study has found that **Western Disturbances are the primary feeder of snowfall for the Karakoram** region during winters. Western Disturbances constitute about around 65% of the total seasonal snowfall volume and about 53% of the total seasonal precipitation. Moreover, the **precipitation intensity of Western Disturbances** impacting Karakoram has **increased by around 10%** in the last two decades which only enhances their role in sustaining the regional anomaly. Previous studies have highlighted the role of temperature in establishing and sustaining the anomaly over the years. This is for the first time that the impact of precipitation in feeding the anomaly has been highlighted.

2. Aridity Anomaly Index

News: The Indian Meteorological Department has released the Aridity Anomaly Outlook (AAO) Index.

About the Aridity Anomaly Outlook (AAO) Index

The index **monitors agricultural drought**, a situation when **rainfall and soil moisture are inadequate** to support healthy crop growth till maturity, causing crop stress.

An anomaly from the normal value signifies a water shortage in these districts that could directly impact agricultural activity.

The index is computed for weekly or 2-week periods. For each period, the actual aridity for the period is compared to the normal aridity for that period.

Negative values indicate a surplus of moisture while **positive values indicate moisture stress**.

Parameters: Actual evapotranspiration and calculated potential evapotranspiration which requires temperature, wind and solar radiation values.

Actual evapotranspiration is the quantity of water that is actually removed from a surface due to the processes of evaporation and transpiration.

Potential evapotranspiration is the maximum attainable or achievable evapotranspiration for a given crop due to evaporation and transpiration.

Key Findings

At least 85% of districts face arid conditions across India. Some 196 districts are in the grip of a 'severe' degree of dryness and 65 of these are in Uttar Pradesh (highest). Bihar had the second-highest number of districts (33) experiencing arid conditions. The state also has a high rainfall deficit of 45%.

3. World Report on Health of Refugees and Migrants by the WHO

News: The World Health Organization has released a report titled 'World Report on the health of Refugees and Migrants'. This is the first such report on refugees/migrants.

Key Findings of the Report

Migrants: Globally, there are around 1 billion migrants or roughly one in eight people are migrants.

Disease, famine, climate change and war have forced people to flee their homelands.

The COVID-19 pandemic continues to disproportionately affect the health and livelihoods of migrants and refugees.

Remittances: In 2021, the top 5 remittance recipients in current US dollars were India, China, Mexico, the Philippines and Egypt.

India received US\$ 87 billion in remittances in 2021.

Challenges to Remittances: Remittances are expected to continue growing in 2022, but there are challenges, such as the COVID-19 crisis. It still poses one of the greatest risks to low-and middle-income countries especially as fiscal stimulus programmes in migrant destination countries cannot continue indefinitely.

4. Gender Gap in Access to Food

News: CARE, an international humanitarian organization has released a report titled 'Food Security and Gender Equality'. The report highlights link between Gender Inequality and Food Insecurity.

Key Findings of the Report

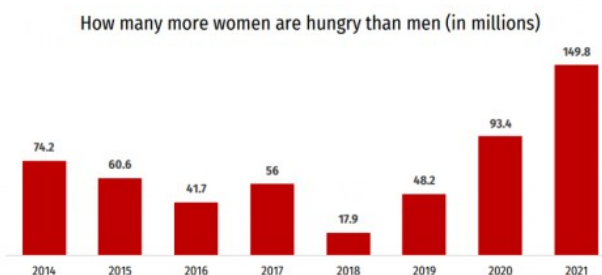
Gender Gap in Food Security: The gap between men and women's food security is growing worldwide. 828 million people were affected by hunger in 2021. Among them, **150 million more women were food insecure than men.**

Gender Inequality and Food Security: Across 109 countries, **as gender inequality goes up, food security goes down.** For instance, nations with high gender inequality, such as Yemen, Sierra Leone and Chad, experienced the lowest food security and nutrition.

Women bear a bigger food insecurity burden: Even when both men and women are technically food insecure, women often bear bigger burdens. In this situation men are found eating smaller meals and women are found skipping meals.

Employed Women Experienced Less Food Insecurity: When women are employed and earning money or when they are directly involved in farming, they are less likely to experience food insecurity.

Women more Likely to Live in Poverty: Women are more likely than men to live in extreme poverty because their work is underpaid or not paid at all. Even before the Covid-19 pandemic, women took on three times as much unpaid work as men.



Suggestions Given by the Report

SDG Goal 5 talks about achieving gender equality and empowering all women and girls by 2030. This requires urgent action to eliminate the many root causes of discrimination that still curtail women's rights in private and public spheres.

Pointly

1. Maritime Partnership Exercise

A Maritime Partnership Exercise (MPX) was conducted between **Japan Maritime Self-Defence Force** and Indian Navy in the Andaman Sea. The exercises were aimed at enhancing interoperability and streamlining seamanship and communication procedures.

2. Exercise Pitch Black

Indian Air Force (IAF) has participated in Exercise Pitch Black. It is a biennial exercise **hosted by the Australian Air Force**. The participating countries include Australia, Canada, France, Germany, Indonesia, India, Japan, Malaysia, Netherlands, New Zealand, the Philippines, South Korea, Singapore, Thailand, UAE, the UK and the US.

3. Exercise Yudh Abhyas

India and the US will hold the 18th edition of the Exercise 'Yudh Abhyas' in Uttarakhand's Auli in October 2022. It is joint exercise between the Indian and US Armies. The exercise was started in 2004 under the US Army Pacific Partnership Program.

4. Exercise Vajra Prahar

The 13th Edition of the Indo-US **Joint Special Forces exercise** 'Ex Vajra Prahar' 2022 commenced at the Special Forces Training School (SFTS), Bakloh in Himachal Pradesh. Exercise Vajra Prahar is a **Special Forces** joint military training exercise. It has been taking place alternately in India and the US since 2010.

5. Exercise Udarashakti

It is a **bilateral Air Force exercise** between the **Indian Air Force** and the **Royal Malaysian Air Force**. Other exercise between India and Malaysia include the **Harimau Shakti**. It is a bilateral joint military exercise.

6. Joint Exercises between India and Oman

Al-Najah: It is a joint military exercise.

Naseem-Al-Bahr (sea breeze): It is a joint naval exercise between the Indian Navy and Oman.

Exercise Eastern Bridge: It is a joint air force exercise.

7. Combined Maritime Forces (CMF)

India has formally commenced cooperation with the Combined Maritime Forces (CMF). CMF was established in 2001. It is a **multinational naval partnership** to promote security, stability and prosperity across approximately 3.2 million square miles of international waters, which encompass some of the world's most important shipping lanes. It is **located in Bahrain** and is commanded by a US Navy Vice Admiral. It consists of 34 member nations. Including countries such as Australia, Bahrain, Brazil, France, Japan, Pakistan, the US, Yemen among others.

India has cooperated with CMF on various occasions in the past e.g., coordination in anti-piracy activities.

8. Small Satellite Launch Vehicle (SSLV)

The **Small Satellite Launch Vehicle (SSLV)** is a small-lift launch vehicle developed by ISRO with payload capacity to deliver 500 kg (1,100 lb) to **low Earth orbit** (500 km (310 mi)). It can also deliver or 300 kg (660 lb) payload to **Sun-synchronous orbit** (500 km (310 mi)). SSLV will be used for launching small satellites, with the capability to support **multiple orbital drop-offs**.

Advantages of SSLV include small assembly times of 72 hours and low cost. It can enable space launch every week.

SSLV's first launch on August 07, 2022 suffered technical glitch and couldn't deploy the satellites in designated orbits.

(Refer EPIC February 2022 for more details).

LAUNCH SERVICES AT A GLANCE

The Small Satellite Launch Vehicle or SSLV made for the launch within one week by six people

THE SPECIFICS	SSLV	PSLV	GSLV MK-II	GSLV MK-III
Height	34m	44m	49.13m	43.43m
Diameter	2m	2.8m	2.8m	4m
Number of stages	three	four	three	three

Payload carrying capacity

SSLV 500kg to low earth orbit	PSLV 1,750kg to 600km sun-synchronous polar orbit and 1,425kg to sub-geosynchronous transfer orbit
GSLV MK-II 2500kg to geosynchronous transfer orbit and 5000kg to low earth orbit	GSLV MK-III Four tonnes into geosynchronous transfer orbit or around 10 tonnes to low earth orbit



SET TO SOAR: The SSLV is set to go on its maiden flight on Sunday

9. Astrobee

Astrobee is NASA's new **free-flying robotic system**. They have been **deployed at the International Space Station** and are working independently, side by side with humans. The robots are designed to complete tasks such as taking inventory, documenting experiments conducted by astronauts with their built-in cameras or working together to move cargo throughout the station. The names of robots deployed are Honey, Queen and Bumble.



10. Wentian

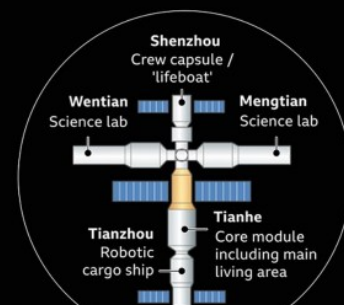
China has successfully launched its second space station lab module named **Wentian** (Wentian means 'quest for the heavens'). It is the second module of **China's Tiangong space station**. It will also function as a backup of the core module, Tianhe. The module is equipped with laboratory cabinets for life ecology, biotechnology and variable gravity science.

11. Tiangong Space Station

It is an under-construction Chinese Permanent space station to be placed in **Low Earth orbit**. The Space Station roughly will have one-fifth the mass of the **International Space Station**. The space station consists of 3 modules – the core module, Tianhe and two lab modules, Wentian and Mengtian. The Tianhe module was launched in 2021 and the Mengtian module is set to be launched in October 2022.

China's space station

How it will look when fully assembled



12. Space Liability Convention, 1972

The Space Liability Convention of 1972 defines responsibility in case a space object causes harm. A launching State shall be absolutely **liable to pay compensation for damage caused by its space**

objects on the surface of the earth or to aircraft, and liable for damage due to its faults in space. However, there is no law against space junk crashing back to earth.

13. MIST Submarine Cable System

The Expert Appraisal Committee under the Ministry of Environment, Forest and Climate Change has recommended Coastal Regulatory Zone (CRZ) clearance for the Myanmar/ Malaysia- India-Singapore Transit (MIST) Submarine Cable System. MIST is an 8,100 Km long **international submarine cable communication network**. It will provide secure, reliable, robust and affordable telecom facilities in Asia. It will boost telecom connectivity between India and other Asian countries, namely Myanmar, Thailand, Malaysia and Singapore.



14. Cryptojacking

Cryptojacking is a **cyber-attack** wherein a computing device is hijacked and controlled by the attacker and is **used to illicitly mine cryptocurrency**. In most cases, a **malicious programme** is installed when the user clicks on an unsafe link, or visits an infected website and unknowingly provides access to their system. Cryptojacking is done to reduce cost of mining of coins of cryptocurrencies by using computing power of hijacked systems. Cryptojacking is **hard to detect** and the victims mostly remain unaware that their systems have been compromised. According to a report, cryptojacking incidents have increased by 30% in 2022 (first 6 months) compared to 2021.

15. Liquefaction of Sand

Liquefaction of sand is a phenomenon in which the **strength and stiffness of a soil are reduced** by earthquake shaking or other rapid loading. Liquefaction **leads to the collapse of structures** resting on the liquefied ground. Scientists have found that the **shape of sand grains influences the liquefaction** of sand. For instance, natural sand with a regular shape liquefies easily compared to sand with an irregular shape.

16. Tetrapods

Tetra pod in Greek means **four-legged**. These are four-legged **concrete structures that are placed along coastlines to prevent erosion and water damage**. A tetrapod can weigh between 2-10 tonnes.

Each of the Tetrapods' four legs extends out in a different direction, leaving space in between its legs. This allows the **tetrapod to dissipate the force of the incoming waves by making the water flow around it** (and not against it). A group of tetrapods also reduces displacement by **mutually interlocking**. Their weight and design permit them to withstand any weather conditions,



17. Pyrene Bioremediation

Pyrene is a polycyclic aromatic hydrocarbon (PAH). It is a carcinogenic. Pyrene originates from multiple sources including combustion of petrogenic fossil fuels and incomplete incineration of

municipal wastes and biomass. It gets lodged into the soil, water and atmosphere resulting in widespread environmental pollution. Researchers at the CSIR have found a fungus named **white-rot fungus Trametes maxima IIPLC-32** which has the potential to cause microbial degradation of pyrene. This fungus causes pyrene degradation using special enzymes. This fungus may prove to be helpful in the remediation of pyrene and decrease the pollution level of the soil.

18. Glasgow Breakthrough

Glasgow Breakthrough Agenda was launched by the United Kingdom and a coalition of 42 world leaders including India at the COP26 World Leaders Summit (November 2021). The agenda sets ambitious goals for 2030 to dramatically **accelerate the innovation and deployment of clean technologies in 5 key sectors** of the economy – **Power, Road Transport, Steel, Hydrogen, and Agriculture**.

India is a co-convenor of the Glasgow Breakthrough on Road Transport together with the UK and the US. The aim is to make Zero Emission Vehicles (ZEVs) – (including 2&3-wheelers, cars, vans and Heavy-Duty Vehicles –) the new normal by making them **affordable, accessible and sustainable** in all regions by 2030.

19. Coastal Clean Up Campaign

It is a 75-day campaign launched by the Government to clean up coastal beaches and raise awareness about ‘Swachh Sagar, Surakshit Sagar’. Its aim is to raise awareness and bring behavioural change about reducing marine litter, minimal use of plastics, segregation at source and waste management. The campaign will culminate on **International Coastal Clean-up Day** (September 17, 2022).

20. Eco Mitram

It is a mobile app launched to spread awareness about the Coastal Clean-up campaign and also for the common people to voluntary registration for the beach cleaning activity on September 17, 2022.

21. Nagar Van Yojana

It was launched by the Ministry of Environment, Forest & Climate Change. Its aim is to create *Nagar Vans* (urban forests) and *Nagar Vatikas* in the country with an objective to significantly **enhance the trees outside forests and green cover, enhancement of biodiversity and ecological benefits** to the urban and peri-urban areas. The scheme envisages developing 400 *Nagar Vans* and 200 *Nagar Vatikas* in the country between 2020-21 to 2024-25. The finances for the scheme will be paid for by the CAMPA (Compensatory Afforestation Fund (CAF) Act, 2016) funds.

22. Endangered Status for Monarch Butterfly

Migratory Monarch Butterfly is a subspecies of the monarch butterfly (*Danaus plexippus*). They are important **pollinators** and provide various ecosystem services such as maintaining the food web. **These butterflies follow a unique lifestyle:** They traverse the length and breadth of the American continent twice a year, feasting on nectar from a variety of flora. But they breed in only one particular plant – the milkweeds.

The population of this butterfly has declined 23-72% over the last decade. **Habitat destruction and climate change** were



the biggest contributors to this decline. The International Union for Conservation of Nature (IUCN) has classified Migratory Monarch Butterflies as Endangered under IUCN Red List.

23. Light-mantled Albatross

It is also known as the **Grey-mantled albatross** or the light-mantled sooty albatross. It is native to Antarctic seas. Its IUCN Status is **Near Threatened**. Light-mantled Albatross has a worldwide population of 21,600 breeding pairs, according to an estimate in 1998. A **light-mantled albatross was recently sighted in Tamil Nadu**, near Rameswaram (Anthonyarpuram Beach, Palk Bay). This is the first time that the bird has been spotted on the Asian continent. Researchers feel a **change in atmospheric pressure** could have been among the reasons for the Albatross to land on an Indian shore.



24. Hasdeo Aranya

Chhattisgarh Legislative Assembly has unanimously passed a private member resolution urging the Union Government to **cancel the allocation of all coal mining blocks** in the ecologically sensitive Hasdeo Aranya (Aranya means forest) area. It lies in the **catchment area of the Hasdeo river** in North-Central Chhattisgarh. The Hasdeo river is a tributary of the Mahanadi river which originates in Chhattisgarh and flows through Odisha into the Bay of Bengal. The Hasdeo forests are also the catchment area for the **Hasdeo Bango Dam** built across the Hasdeo river which irrigates 6 lakh acres of land. Besides, the forests are ecologically sensitive due to the **rich biodiversity** they offer and due to the presence of a **large migratory corridor for elephants**.

25. Indian Virtual Herbarium

It has been developed by the **Botanical Survey of India (BSI)**. It is a **digital database of plants** and preserved parts of plants with labelled information. The herbarium provides information on plants in different categories such as **Cryptogams** (spore-bearing plants), **Phanerogams** (seed-bearing plants). Each record in the digital herbarium includes an image of the preserved plant specimen, scientific name, collection locality, and collection date, collector name, and barcode number. This is the **biggest virtual database of flora** in the country.

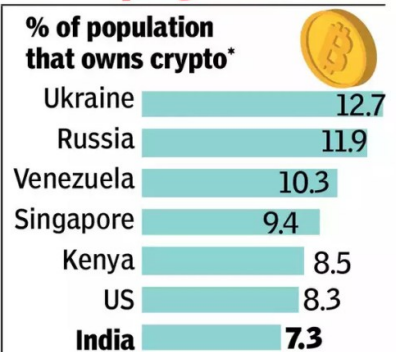
26. India's Trade Deficit

India's trade deficit widened to a record US\$ 31.02 billion in July 2022 due to contracting merchandise exports and a rise in imports. This is a three-times increase from the US\$ 10.63 billion trade deficit reported in July 2021.

27. Ownership of Cryptocurrencies

According to a UNCTAD report Ukraine has topped the list of countries with respect public ownership of cryptocurrencies. 12.7% Ukrainians own cryptocurrencies. It is followed by Russia (11.9%), Venezuela (10.3%), Singapore (9.4%), Kenya (8.5%) and the

Developing Ecos Lead

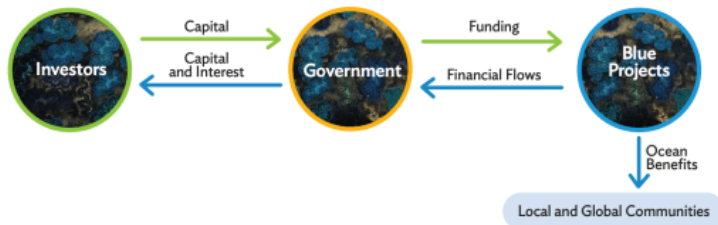


Source: UNCTAD; *As of 2021

US (8.3%). India has been ranked 7th with 7.3% Indians owning cryptocurrencies.

28. Blue Bonds

A blue bond is a debt instrument issued by governments, development banks or others to raise capital from investors to finance marine and ocean-based projects (like sustainable oceanic resource mining and sustainable fishing) that have positive environmental, economic and climate benefits. The issuance of a blue bond enables investors to fulfil their corporate social responsibilities and generate benefits for the ocean. SEBI has proposed the concept of blue bonds as a mode of sustainable finance. The Republic of Seychelles launched the world's first sovereign blue bond in 2018 raising a total of \$15 million to advance the small island state's blue economy.



29. India Innovation Index

NITI Aayog has released the India Innovation Index 2021. It is prepared by the Institute for Competitiveness. It is a tool for the evaluation of the country's innovation ecosystem and ranks the States and the UTs on 7 key pillars. Karnataka topped in the 'Major States' category. Manipur emerged as a winner in the 'North East and Hill States' category. Chandigarh was the top performer in the 'Union Territories and City States' category.



30. Fall in India's Forex Reserves

From a peak of \$642.45 billion in 2021, India's foreign exchange reserves have dipped to \$572.71 billion as of July 2022. That's a fall of almost \$70 billion in just over 10 months. The forex fell due to outflow of funds from the domestic market by Foreign Portfolio Investors (FPIs, US\$30.3 billion withdrawn since January 2022), rising oil prices, RBI's intervention in currency market to stabilize the value of Rupee (exchange rate) and change in value of foreign currency assets due to change in exchange rate of US\$ and the Euro.

31. GI Tag for White Onions

The White Onion of Alibaug in Maharashtra's Raigad district has received a 'Geographical Indication'. Alibaug is a coastal town in the Raigad district of Maharashtra. The soil of Alibaug taluka has low sulphur content. Due to this, onions here have low pungency, sweet taste, 'no tear' factor, low pyruvic acid, high protein, fat and fibre content, besides high antioxidant compounds (quercetin). It boosts immunity, helps with insomnia, blood cleaning, blood pressure and heat-related ailments.

32. Shrimad Rajchandra

Shrimad Rajchandra (1867 – 1901) was a Jain poet, philosopher, scholar and reformer. Honoured as *Yugpurush*, he gave the world a rich heritage that continues to guide generations of seekers, in a short span of 34 years. He wrote a large number of philosophical poems including **Atma Siddhi**. He is best known for his teachings on Jainism and his **spiritual guidance to Mahatma Gandhi**. The Prime Minister of India inaugurated and laid the foundation stone of various projects of the Shrimad Rajchandra Mission at Dharampur in Gujarat.

33. Jagriti Mascot

The Department of Consumer Affairs (DoCA) has launched 'Jagriti' mascot. It is a mascot for empowering consumers and generating awareness of their rights. It will be projected as an empowered consumer who is spreading awareness about consumer rights & addressing solutions to the problems faced by the consumers. The mascot shall be shown along with tagline "Jago Grahak Jago" in all its media campaigns.



34. NAMASTE Scheme for Cleaning of Sewers and Septic Tanks

The Union Government has formulated a NAMASTE scheme for cleaning of sewers and septic tanks. It stands for **National Action Plan for Mechanized Sanitation Ecosystem**. The nodal ministries are **Department of Drinking Water and Sanitation, Ministry of Social Justice and Empowerment** and the **Ministry of Housing and Urban Affairs**. Its aim is to achieve outcomes like **zero fatalities in sanitation work** in India, no sanitation workers come in direct contact with human faecal matter and all Sewer and Septic tank sanitation workers have access to alternative livelihoods. This scheme replaces the Self Employment Scheme for Rehabilitation of Manual Scavengers. The scheme will be implemented from 2022 to 2026 across 500 cities/townships notified under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT).

35. Atal Vayo Abhyuday Yojana (AVYAY)

It is a scheme under the **Ministry of Social Justice & Empowerment**. Its aim is to **improve the quality of life of the Senior Citizens** by providing basic amenities like shelter, food, medical care and entertainment opportunities. It has several sub-components like **Integrated Programme for Senior Citizens (IPSrC)**, **State Action Plan for Senior Citizens (SAPSrC)**, **Rashtriya Vayoshri Yojana (RVY)**, **Senior Able Citizens for Re-employment in Dignity (SACRED)**, **Action Groups Aimed at Social Reconstruction (AGRASR)**, **Senior-care Aging Growth Engine (SAGE)**-Silver economy for Senior Citizens, **Elderline** – National Helpline for Senior Citizen etc.

36. Vidya Samiksha Kendra

Vidya Samiksha Kendra (VSK) is aimed at leveraging data and technology to bring a big leap in learning outcomes. It will help states in tracking student enrolment, progress in their learning levels, Out of School Children mainstreamed, textbook delivery, support required by teachers and schools etc.

37. Landlord Port Model

In the landlord port model, the publicly governed port authority acts as a regulatory body and as a landlord while private companies carry out port operations (mainly cargo-handling activities). The **port authority maintains ownership** of the port while the **infrastructure is leased to private firms** that provide and maintain their own superstructure and **install their own equipment to handle cargo**. The landlord port gets a share of the revenue from the private entity.

Jawaharlal Nehru Port (JNP) has become the first major landlord port in India.

38. Suryamitra Skill Development Programme

It is being implemented by the **Ministry of New and Renewable Energy** with the help of **National Institute of Solar Energy (NISE)** since 2015-16. Its aim is to train the youth of age above 18 years as solar PV technicians for installation, operation and maintenance of solar power projects. The impact assessment report for the programme observed that more than 88% of trainees reported an increase in job opportunities.

39. Gati Shakti Vishwavidyalaya

The **National Rail and Transportation Institute**, Vadodara (a deemed university) will be converted in to the Gati Shakti Vishwavidyalaya. The Vishwavidyalaya will be sponsored and funded by the Union government through the **Ministry of Railways**. It will take measures to provide quality teaching, research, and skill development in disciplines related to transportation, technology, and management.

40. SMILE-75 Initiative

It has been launched by the Ministry of Social Justice & Empowerment. Its aim is to make cities/towns and municipal areas begging-free. It will also make a strategy for comprehensive rehabilitation of the persons engaged in the act of begging through the coordinated action of various stakeholders. 75 Municipal Corporations in collaboration with NGOs and other stakeholders will cover several comprehensive welfare measures for persons who are engaged in the act of begging.

NOTE: With effect from 1st February, the monthly ForumIAS Epic Magazine, for the month will provide wholistic coverage for the said month up to 20th of the month. This ensures that issues / stories that occur after 21st of the month are allowed to fully develop and are covered wholistically in the next month.