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Volume 2 : Indian Economy

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INDIAN ECONOMY ISSUES RELATING TO PLANNING, MOBILIZATION OF RESOURCES

1. Foreign Trade Policy, 2024

Why is it in news?

Since the middle of 2022, the value of global merchandise trade has shrunk continuously, according to UNCTAD. India's performance in 2023-24, has been largely in line, with merchandise exports ($437.1 billion) falling 3.1% from 2022-23.

What is a Foreign Trade Policy?

- India's Foreign Trade Policy (FTP), formerly known as the EXIM Policy, acts as the rulebook for import and export activities in the country.
- Established under the Foreign Trade Development and Regulation Act of 1992, the FTP lays down regulations that facilitate smooth business operations in international trade.
- The Ministry of Finance, along with the Ministry of Commerce and Industry and the Directorate General of Foreign Trade (DGFT), collaboratively review and update the FTP at regular intervals.
- The current policy is FTP 2023.

What are the Objectives of FTP 2023?

- The FTP aims to streamline foreign trade procedures, making them easier for businesses to navigate.
- It also focuses on boosting India's exports by providing incentives and fostering collaboration among exporters, government agencies, and Indian missions abroad.
- The FTP 2023 emphasizes four main pillars:
    - **Incentives and Rebates:** This includes schemes to reduce costs and offer benefits to exporters.
    - **Collaborative Export Promotion:** Encourages cooperation between exporters, different levels of government (states and districts), and Indian missions overseas.
    - **Ease of Doing Business:** Aims to simplify procedures and reduce transaction costs for exporters through e-initiatives.
    - **Focus on Emerging Areas:** This includes promoting e-commerce exports, developing new export hubs, and streamlining policies for Special Economic Zones (SEZs).

What are the goals of the FTP 2023?

- **Boost Economic Growth:** FTP 2023 aims to increase India's exports and imports, leading to overall economic growth.

- **Enhance Resource Access:** The policy focuses on making resources and capital goods available to fuel long-term economic expansion.
- **Industry Competitiveness:** It aims to boost the competitiveness of Indian industries in agriculture, services, and other sectors while maintaining quality and generating employment.
- **Affordable Goods & Services:** The policy seeks to ensure accessibility of reasonably priced, high-quality goods and services for the people.
- **Global Integration:** FTP 2023 promotes international integration that aligns with India's development goals.
- **Top Exporter Status:** The policy supports India's ambition to become a leading exporting nation by preparing for future challenges.
- **District-Level Exports:** It encourages exports at the district level through collaboration with state governments.
- **Tripling Exports by 2030:** FTP 2023 has a ambitious target of tripling India's exports of goods and services to USD 2 trillion by 2030.

What are the highlights of the FTP 2023?

- **Focus on Automation & Reduced Incentives:** Streamlined processes with automated IT systems for approvals, with less emphasis on incentives and more on convenience for exporters.
- **Expanded Towns of Export Excellence (TEEs):** Four new TEEs added, allowing them to leverage Common Service Providers (CSPs) and receive priority export promotion funding.
- **Recognition for Exporters:** Status-based recognition program for exporters with training opportunities for qualifying companies, aiming to develop a skilled workforce for India's economic growth.
- **Boosting District-Level Exports:** Priority on district-level exports through collaboration with states. The Districts as Export Hubs (DEH) program identifies export-worthy goods and creates district-specific action plans.
- **Simplified SCOMET Policy:** Streamlined Special Chemicals, Organisms, Materials, Equipment, and Technologies (SCOMET) policy for easier exports while maintaining compliance with international regulations.
- **Emphasis on E-commerce Exports:** FTP 2023 acknowledges the potential of e-commerce exports, with plans to facilitate setting up e-commerce platforms and address key issues like export authorization and payments. The maximum value for e-commerce exports via courier services has been increased.
- **Enhanced Export Promotion Capital Goods (EPCG) Scheme:** Duty-free import of capital goods under the EPCG scheme with additional benefits for specific sectors like textiles and dairy.
- **Promoting Merchanting Trade:** Measures to position India as a global trading hub, allowing export of restricted items through Indian agents and facilitating international trade without goods physically entering India (subject to RBI regulations).

- **Amnesty Scheme for Exporters:** A one-time opportunity for exporters to clear past dues on Advance Authorisations and EPCG schemes with capped interest and regularization options. This aims to help exporters facing challenges with high duty and interest burdens.

What are the concerns associated with FTP 2023?

- **Outdated Approach:** prioritizing 20th-century style regulation and procedures over the 21st-century focus on development and facilitation of trade.

- **Potential Impact on Labor-intensive Sectors:** The policy's focus on technology-intensive sectors could neglect already struggling labor-intensive sectors like textiles and clothing, especially considering the global economic slowdown.

- **Limited Effectiveness in a Challenging Environment:** Given the potential worsening of the global economic situation, the policy's effectiveness in boosting exports might be limited.

The FTP 2023, is expected to stimulate export activity, particularly for MSMEs, and establish a favourable climate for continued export expansion. By addressing the concerns, the policy can evolve into a more robust and adaptable framework that effectively fosters export growth and strengthens the nation's position in the global market.

2. De- dollarization

a) Why in news?

US rivalry with China, fallout from Russia's war in Ukraine and mounting US debt have put the dollar's status as the world's dominant currency under fresh scrutiny.

b) What is the concept of de-dollarization?

De-dollarisation refers to the replacement of the U.S. dollar by other currencies as the global reserve currency that is widely used in cross-border transactions and is commonly held as reserves by central banks. It involves reduction of reliance on the US dollar in international trade, reserves, and financial transactions. This is a significant trend with profound implications for economies worldwide, including India.

c) How is de-dollarization manifesting in India's international trade and finance?

- **Promotion of the Rupee in International Transactions:** The RBI introduced a framework in July 2022 to enable international trade settlements in Indian rupees. This initiative marks a significant step towards transforming the rupee into a widely accepted medium of exchange for global trade.

- **Bilateral Trade in Local Currencies:** India has secured agreements for trading in local currencies with nations like Russia, Iran, and the UAE, moving away from the US dollar.

- **Currency Swap Agreements:** India has signed multiple bilateral local currency swap agreements with countries around the world. These arrangements would provide liquidity to our trading partners for the purchase of Indian goods and services and also address short-term liquidity mismatches.

d) What are the Key Factors driving de-dollarization?

- **Dollar's Erosion**: The U.S. dollar's dominance is gradually eroding with emerging economies like China gaining prominence.
    - The dollar's share in Forex reserves fell to a 20-year low of 58% in the fourth quarter of 2022, according to IMF.
- **Geopolitical Factors**: Countries like Russia and China are driving de-dollarization to decrease their exposure to U.S. sanctions and interference.
- **Weaponization of Global Financial Systems**: Russia's exile from SWIFT Network and freezing more than USD 300 Billion Russian assets have created fear among non-U.S. allies.
    - Countries willing to continue trading with Russia, like India and China, have started doing so in Rupee and Yuan respectively.
- **Risk Diversification**: Countries are opting for diversification of reserves to manage the risks of U.S. economic policy changes and hedge against dollar volatility.
    - Plans to deploy a new BRICS Currency backed by gold and other metals with intrinsic value.
- **Euro's Emergence as a credible alternative to the dollar:** accounting for 25% of global reserves in the fourth quarter of 2022.
- **Introduction of Digital Currencies**: by central banks also signal a potential threat to the dollar's dominance.
    - China's digital yuan.
- **Worsening Debt situation and Strengthening of Dollar post-pandemic:** are compelling many developing economies to look for alternatives to dollar.

e) What are the opportunities that de-dollarization presents for India?

- **Reduced Exchange Rate Risk**: contributing to enhanced economic stability.
    - RBI has recently approved trade settlement in INR.
- **Monetary Policy Independence**: greater autonomy in monetary policy by reducing external influences.
- **Potential for Rupee Internationalization**: enhancing India's economic clout globally.
    - After Russia, 35 countries show interest in INR trade settlement mechanism.
- **Trade Diversification**: Reduced reliance on the dollar could open up opportunities to diversify trade partners.
- **Boost to Regional Trade and Integration**: within SAARC and with ASEAN by reducing transaction costs.
- **More Bilateral and Multilateral Trade Agreements**: which could favor India's trade balance.

f) What are the Challenges that de-dollarization presents for India?

- **Geopolitical Dilemma**: With border tensions with China and the U.S. viewing India as a strategic partner, supporting de-dollarization could create geopolitical complications.
- **Economic Volatility**: due to potential fluctuations in the value of alternate currencies.
- **Trade Disruptions**: in established trade channels and contracts.
- **Limited Acceptance of Rupee**: due to limited convertibility and financial market is not completely open to foreign investors.
  - Accumulation of Rupee reserves with Russia.
- **Impact on Foreign Investments**: affect the FDI inflow into India, as investors prefer transactions in globally accepted and stable currencies.

A balanced approach, gradual transition, and strategic global partnerships will be crucial for India in navigating de-dollarization trend. It is essential for India to ensure domestic economic stability while aspiring to enhance its role in the global economy.

3. Online Gaming & GST

Why is it in news?

- Changes in the Goods and Services Tax (GST) have raised the tax rate to 28% on the total face value of bets, affecting both games of skill like Chess and the games of chance like Rummy.
- The Prime Minister's vision to establish India as a prominent global gaming hub has received renewed attention as he engaged with seven of the top gamers in the country.

What is the status of the Online Gaming Industry?

- India's gaming market was worth $2.6 billion in FY2022, and is expected to reach $5 billion by 2025.
- The sector grew at a CAGR (Compounded Annual Growth Rate) of 28% between FY 2019-20 and FY 2022-23 and is projected to reach ₹33,243 crore by FY28 with a 15% CAGR.
- There are currently over 900 gaming companies in India, a vast majority of which fall within the MSME sector.
- The online gaming industry has generated over ₹2,000 crore in GST revenue.
- While the size of the global gaming industry crossed $300 billion in 2021, the online gaming segment in India constitutes only 1.1% of the global online gaming revenue.

What is the significance of Online Gaming Industry to India's Economic Growth?

- **Job Creation**: This sector provides direct and indirect employment opportunities. Its rapid growth increases opportunities for IT professionals, creative designers and game developers.

- **It attracts Foreign and Domestic Investment**: The promising growth trajectory has attracted both foreign and domestic investment.

- Investors see the potential to leverage India's tech expertise and the large market base, injecting crucial capital for scaling the industry.

- **Part of the Digital Economy Vision**: Online gaming is integral to the 'Digital India's vision and the goal of a $1 trillion digital economy.

  - Supporting the development of an online gaming hub aligns with India's technological and economic ambitions.

- **Potential for International Growth**: Tapping into cultural narratives and Indian mythology offers unique content to both domestic and global audiences.

- **Boost to Ancillary Services**: Growth in the gaming industry stimulates allied sectors like animation, visual effects, and comic creation.

  - This multiplier effect enhances the digital ecosystem, further bolstering economic gains.

Despite this, an uncertain regulatory environment has stymied its progress.

What are the implications of an uncertain regulatory environment?

- **Ambiguity in Taxation**: This increase in the GST from the earlier 18% to 28% has caused many startups and MSMEs to struggle, leading to layoffs and shutdowns.

- **Unclear Compliance Guidelines**: forces firms to invest heavily in restructuring, impacting their profitability and sustainability.

- **Blurred Legal Definitions**: The distinction between skill gaming and gambling remains vague. This ambiguity leads to regulatory overlap and inconsistent enforcement, discouraging foreign investment and stifling innovation.

- **Lack of Self-Regulation**: Although self-regulatory bodies have been proposed within the IT Rules of 2021, their implementation is yet to be realised.

- **Proliferation of Offshore Platforms**: The stringent domestic regulations have resulted in many gamers turning to offshore gaming platforms.

  - This shift impacts domestic companies and reduces the government's tax revenue, as these platforms often evade local regulations.

What measures are needed to unlock its full potential?

- **Establish a Clear Regulatory Framework**: distinguishing between skill-based gaming and gambling and encourage responsible self-regulation with effective oversight.

- **Rational Taxation Policy**: Reassess the GST rate particularly for skill-based games, to ensure sustainability.

- **Combating Illicit Platforms**: Enhance cybersecurity and impose penalties to prevent their proliferation.

- **Supporting Startups and MSMEs**: Establish incubation (i.e., process of development) hubs and offer incentives like tax breaks and grants to encourage innovation in gaming.
- **Promoting Skill Development**: Invest in training programmes focusing on gaming technology, animation, and content creation.
- **Cultural Integration**: Promote games rooted in Indian mythology and folklore to tap into domestic and global markets.
- **Enhance Consumer Protection:** Implement stringent measures to protect online gamers from fraud and ensure fair play, thereby boosting consumer confidence in the industry.
- **Foster Global Collaborations:** Encourage partnerships with international gaming leaders to exchange knowledge, technology, and market access, positioning India as a global gaming hub.

India stands on the cusp of emerging as a global gaming hub. With the right measures, India can harness its rich cultural narratives and talent to achieve a $1-trillion digital economy and shape the global gaming landscape.

4. State Finances: A Study of Budget of 2023-24

Why is it in news?

Recently the Reserve Bank of India released the report titled "State Finances: A Study of Budgets of 2023–2024."

What are the Key Highlights of the RBI's Report on State Finances?

- **Fiscal Deficit Management**: The combined states' gross fiscal deficit (GFD) was contained at 2.8% of GDP, below budget estimates for the second consecutive year.
- **Increased Tax Buoyancy:** The implementation of the GST has led to increased tax buoyancy for states, improving their financial positions.
- **Outstanding Liabilities**
  - **Decrease in Liabilities**: States' total outstanding liabilities are expected to decrease from a peak of 31% of GDP in 2020-21 to 27.6% in 2023-24.
  - **High Liability States**: Despite the overall decrease, several states still have outstanding liabilities above 30% of GDP. Ex: Punjab, Bihar, Kerala, Andhra Pradesh, etc.
  - **Off-Budget Borrowings:** In 2022, the central government included off-budget borrowings by states while deciding their net borrowing ceiling. The off-budget borrowings by states are estimated to reduce by over 70% in 2022-23 compared to 2021-22.
- **Revenue Expenditure**: Revenue expenditure growth slowed to 8.9 percent. The ratio of revenue expenditure to capital outlay (RECO) improved, indicating better quality of state expenditures.
- **Decrease in Reliance on Market Borrowings**: States' reliance on net market borrowings decreased to 76% of the planned GFD for 2023-2024.

- **Expenditure Allocations**
  - **Reduction in Revenue Expenditure as a Proportion of GDP**: Funding for several development-related initiatives was cut, while spending on the power industry, healthcare, and public health increased in response to the pandemic's second wave.
  - **Revenue and Social Sector Expenditures**: States allocated 14.4 percent of GDP for revenue expenditures and 8 percent for social sector expenditures in 2023-2024.
  - **Committed Spending**: Administrative costs, pensions, and interest payments are anticipated to remain around 4.5 percent of GDP.
  - **Capital Expenditure Surge**: Capital expenditure is expected to increase by 42.6 percent due to higher loan allocations under the Scheme for Special Assistance to States for Capital Investment.
- **Rise in Own Tax Revenue:** has increased from 5.7 percent of GDP in 2003-04 to 6.9 percent of GDP in 2022-23.

What are the Issues with the State Finances?

- **States' dependence on fiscal transfers:** reflected in the share of transfers in total expenditure, increased sharply during the pandemic period of 2020-21 and 2021-22 but it has moderated to 40 percent in 2022-23.
  - The Centrally Sponsored Schemes now account for around two-thirds of the total grants. On the other hand, the Finance Commission grants constitute only around a quarter of the total grants from the Centre.
- **Share of States' Own Non-Tax Revenue:** in total revenue has declined steadily in the last decade, remaining below 10 percent since 2010-11 (1.3 percent of GDP in 2022-23).
- **Revenue Deficit amidst Tapering Grants:** The 15th Finance Commission recommended revenue deficit grants for certain states between 2021-22 and 2025-26, which taper off each year. Despite these grants, several states continue to budget a revenue deficit.
- **GST Slabs Rationalisation Post-Compensation Period:** SGST revenue for some States remains lower than both the pre-GST period and the guaranteed revenue levels.
- **Significant Share of Subsidies Spent on Electricity Sector:**
  - **Subsidy Allocation**: States have been spending around 8%-9% of their revenue receipts on subsidies, a significant portion of which goes towards providing subsidised or free electricity.
  - **Non-Merit Goods Concern**: Rising subsidies for non-merit goods in several states raise concerns, as they may constrain the fiscal space available for capital expenditure.
- **Financial Health of Discoms and Associated Risks:** While financial losses of state-owned discoms reduced in 2021-22 on account of higher subsidies, their significant debt poses a risk to state finances.
- **Capital Outlay and Central Aid:** Despite increased loans, states' spending on capital outlay has remained at similar levels. The capital outlay to GSDP ratio for several states is estimated to decrease in 2022-23 compared to 2021-22.

What is the Way Forward for State Finances?

- **Strict Adherence to Fiscal Deficit Targets**: and reducing non-merit subsidies and transfers are essential to maintain fiscal discipline and avoid disrupting recent fiscal consolidation gains.

- **Enhancing Fiscal Capacity:** States should enhance fiscal capacity by improving tax administration and scale-up initiatives for asset monetisation to increase non-tax revenue.

- **GST Slabs Rationalisation:** The 15th Finance Commission recommended merging tax slabs and minimising exemptions to restore the revenue-neutral rate under GST.

- **Review of the Current System of Grants:** the Finance Commissions could consider recommending an increased share of conditional transfers based on reforms, quality of expenditure and fiscal sustainability to harness healthy competition across States towards improving their economic performance.

- **Avoiding Old Pension Scheme (OPS) Reversion**: Transitioning back from the National Pension System (NPS) would strain state finances and limit the capacity for growth-enhancing capital expenditures.

- **Enhancing Information Dissemination**: such as guarantees, off-budget borrowings, and resource transfers. This transparency will enhance credibility and confidence in state finances.

5. FDI in Space Sector

Why is it in news?

In line with the the Indian Space Policy 2023, the Union Cabinet has eased the FDI policy on Space sector by prescribing liberalized FDI caps (maximum limits) for various sub-sectors/activities.

What is the status of India's Space Sector?

India's space sector is experiencing a period of significant growth and transformation.

- **Strong Foundation:** The ISRO has built a robust indigenous space program, achieving remarkable feats like the Mangalyaan, Chandrayaan missions and the Aditya-L1 mission to study the Sun.

- **Economic Potential:** With a current share of around 2-3% of the global space economy, India is poised for a significant leap. Estimates suggest a potential growth to over 10% by 2030.

- **Private Participation:** The government's focus on creating a supportive policy framework through the new space policy 2023 signals a shift towards a more private-friendly sector. The number of space-related startups is booming, and the allocation of INR 13,043 crore for the space sector in the recent budget demonstrates a commitment to financial backing for private ventures.

- **Focus on Cost-Effectiveness:** ISRO is renowned for its cost-efficient space missions and satellite launches. This advantage is a major selling point for India's space industry.

What are the recent changes made to the FDI Policy?

Sector/Activity	**Entry Route**
Satellites-Manufacturing & Operation	**Up to 74%:** Automatic **Beyond 74%:** Government route
Satellite Data Products	
Ground Segment & User Segment	
Launch Vehicles and associated systems or subsystems	**Up to 49%:** Automatic **Beyond 49%:** Government route
Creation of Spaceports for launching and receiving Spacecraft	
Manufacturing of components and systems/ sub-systems for satellites, ground segment and user segment	**Up to 100%:** Automatic

How are the recent changes expected to boost private participation?

- **Relaxation of Foreign Direct Investment (FDI) norms** is a major game-changer.
  - **100% FDI under automatic route** for satellite component manufacturing. This eliminates bureaucratic hurdles and allows foreign companies to invest freely, bringing in technology and expertise.
  - **Liberal FDI limits boost confidence:** Increased investment caps signal a welcoming environment for global space players, fostering collaboration and knowledge transfer.
- **Benefits for Start-ups:**
  - **Easier access to global capital pools**: This empowers Indian space start-ups, to expand their operations and compete effectively.
  - **Increased funding facilitates research and development (R&D),** leading to innovation and technological advancements within the domestic space industry.

What are the other benefits of the liberalized FDI Policy?

- **Technological Advancement:** Collaboration with foreign players facilitates knowledge transfer and access to modern technologies. This accelerates India's technological development in the space domain.
- **Integration into Global Value Chains:** Indian companies can participate more actively in international space projects, enhancing their global competitiveness and market share.
- **Job Creation:** Increased investment leads to expansion and innovation, creating new employment opportunities in the sector.

- **Make in India & Atmanirbhar Bharat:** The policy incentivizes setting up manufacturing facilities within India, aligning with government initiatives for domestic production and self-reliance.

- **Sophistication of Products:** With access to foreign capital and expertise, Indian companies can develop a robust space-based infrastructure for applications like navigation, communication, and Earth observation.

- **Global Competitiveness:** The policy empowers domestic companies to scale up their operations and compete effectively in the global market.

- The liberalized FDI policy is a significant step towards achieving the goals outlined in the Indian Space Policy 2023. It has the potential to:

  - **Propel India's space sector** to a leadership position.

  - **Foster a robust space ecosystem** with a thriving private sector.

  - **Contribute to India's economic growth and technological prowess.**

By effectively utilizing this policy, India can unlock its true potential in the space sector and contribute significantly to the global space economy.

GROWTH, DEVELOPMENT AND EMPLOYMENT

6. Gig Economy

Why is it in news?

Taking note of the absence of any specific welfare scheme by the government for gig and platform workers and unorganized sector workers despite its earlier recommendation, the parliamentary standing committee on labour has asked the Ministry of Labour and Employment to formulate and implement welfare schemes for such workers at the earliest.

What is Gig Economy?

- The gig economy is a work model based on short-term engagements between companies and independent workers.
- Its key feature is the lack of a traditional employer-employee relationship.
- Gig workers are independent contractors, online platform workers, or on-call workers. They are responsible for their taxes, social security, and benefits.
- **It** operates on a free market basis, with companies seeking temporary workers to meet specific needs. Jobs are temporary and project-based, lasting for a few hours, days, or weeks.
- Companies like Ola, Uber, Zomato, and Swiggy are prominent players in India's gig economy.

What is the status of Gig Economy in India?

- **Rapid Growth:** India's gig economy is booming, with a Compound Annual Growth Rate (CAGR) of 17% according to ASSOCHAM.
- **Current Workforce:** As of 2020-21, there were 7.7 million gig workers in India, and this number is projected to reach 23.5 million by 2029-30 (NITI Aayog).
- **Skill Distribution:** The gig economy caters to a variety of skill levels, with nearly half (47%) of jobs in medium-skilled sectors, followed by low-skilled (31%) and high-skilled (22%) jobs.
- **Growth Potential:** The gig economy can play a crucial role in harnessing India's demographic dividend, with its vast working-age population reaching 960 million by 2049.

What are the Challenges faced by the Gig Economy in India?

- **Unpredictable Work & Income:** Gig work can be feast or famine, with income fluctuating greatly depending on available gigs and market demand. This can make financial planning difficult.
- **Lack of Workplace Safety and Standards:** Since gig workers are often independent contractors, there may be a lack of safety regulations and enforcement, leading to higher risks of accidents and injuries.
- **Platform Algorithms and Bias:** Digital platforms that connect workers with gigs may use algorithms that can be biased, unfairly distributing work opportunities or leading to lower wages.

- **Lack of Unionization and Collective Bargaining:** The independent nature of gig work makes it difficult for workers to form unions and collectively bargain for better wages and working conditions.

- **Technological Disruption:** The gig economy itself is susceptible to disruption by automation and technological advancements, potentially displacing gig workers altogether.

- **Lack of Social Security Benefits:** like health insurance and paid leave, and traditional employee protections.

- **Delay in implementation of labour codes:** Code on Wages, 2019 aims to provide minimum wages for gig workers and Code on Social Security, 2020 recognizes gig workers as a new category, but rules are yet to be framed, delaying benefits.

- **Skills Gap & Limited Growth:** Training and upskilling opportunities are scarce, hindering career advancement for gig workers.

- **Voluntary Unemployment:** Some may choose the flexibility of gig work over traditional jobs, potentially reducing the overall workforce.

Way Forward:

- **Social Security and Benefits:**
  - **Fiscal Incentives:** Tax breaks or startup grants for businesses employing a significant number of women gig workers (NITI Aayog).
  - **Retirement Plans & Insurance:** Platforms and the government should collaborate to offer retirement benefits, health insurance, and income support during emergencies (NITI Aayog).
  - **Paid Leave:** Platforms should offer paid sick leave in addition to insurance (NITI Aayog).
  - **Social Security Fund:** Establish a fund through transaction fees on platforms to support gig worker social security (Rajasthan Act).
  - **Design Portable Social Security Benefits:** that move with workers across platforms.

- **Regulation and Worker Rights:**
  - **Overtime Pay:** Implement regulations defining "regular hours" and mandating overtime pay for exceeding them.
  - **Collective Bargaining:** Establish platforms for collective bargaining and grievance redressal, like the Rajasthan Act's board.
  - **Transparency in Algorithms:** Increase government oversight on platform algorithms used to assign work and ensure fairness.
  - **Welfare Board:** Set up a national-level welfare board for gig workers, requiring mandatory registration with the board by both workers and platforms.
  - **Implement Disconnect Policies:** for gig workers to ensure they have designated periods free from work communication, promoting healthy boundaries and preventing burnout.
  - **Occupational Safety and Health:** Provide essential safety training, equipment, and

resources, especially for high-risk jobs.

- **Upskilling & Reskilling:** Partner with platforms for targeted training programs and expand government skilling initiatives to include micro-credentials relevant to the gig economy. Offer resources to help workers adapt to changing skills demands.

As India navigates the evolving landscape of the gig economy, prioritizing both growth and fairness will ensure the empowerment of workers, foster innovation, and contribute to a more inclusive and prosperous economy.

Additional Information:

- **Rajasthan Platform Based Gig Workers Act (2023):** Proposes a social security fund with contributions from platforms, government, and workers.
- **Karnataka Gig Workers Bill (2024) (draft):** Aims to address shortcomings of Rajasthan's Act by focusing on income security, penalties on platforms for non-compliance, worker safety and health and Gig worker welfare fee based on transaction value.

7. Virtual Digital Assets (VDAs)

Why is it in news?

The central government has tightened regulatory control over virtual digital assets, more commonly known as cryptocurrencies. The government has mandated that a host of trading activities in such assets will now come under the ambit of the Prevention of Money Laundering Act (PMLA).

What are Virtual Digital Assets (VDAs)?

Virtual Digital Assets (VDAs) are digital representations of value that can be traded or transferred and used for payment or investment purposes. With the rise of digital technology, VDAs have emerged as a new class of assets, including cryptocurrencies like Bitcoin and Non-Fungible Tokens (NFTs).

What is the status of VDA industry in India?

- **Growing Popularity**: VDAs are gaining traction in India with a significant number of users and trading platforms.
  - Various cryptocurrency exchanges CoinDCX, WazirX, ZebPay, etc. operate in India.
- **Economic Potential**: including investment opportunities and financial inclusion.
  - Blockchain technology, underlying VDAs, can revolutionize various sectors including banking.
- **Innovation**: The industry is marked by continuous innovation and the introduction of new products and services.
- **Market Shift**: There is a noticeable shift towards Peer-to-Peer (P2P) platforms in the VDA market.
  - Introduction of a 30% income tax on gains made from cryptocurrencies in India from April 2022.

What is the need for regulation of VDAs?

- **Money Laundering**: due to their **pseudonymous nature** concerns about cryptocurrencies being used to launder money have been raised.
  - The G20 has placed the regulation of VDAs as a priority to curb financial crimes.
- **Terrorist Financing**: VDAs can be used to finance terrorist activities due to their global and decentralized nature.
  - The 'No Money for Terror' conference in India commited to end financing of terror through VDAs.
- **Tax Evasion**: VDAs can be used to evade taxes, leading to loss of revenue for the government.
- **Lack of Transparency**: Concerns around the misuse of VDAs stem from a lack of reporting and transparency norms.
  - The RBI Deputy Director highlighted the difficulty in regulating VDAs due to unreliable data on transactions.
- **Lack of Consumer Protection:** The lack of regulation allows bad actors to engage in unchecked transactions and defraud investors.
  - Collapse of FTX one of the largest VDA exchanges.
- **Market Integrity**: Regulation is needed to ensure transparency, fairness, and integrity in the VDA market.
  - Need for Standard Operating Procedures (SOPs) to regulate key areas of VDAs in India.
- **Cross-Border Challenges**: VDAs pose unique cross-border regulatory challenges requiring international cooperation.
  - India's stance on VDAs can influence global regulations, especially during its G20 presidency.

Measures needed to extend regulatory oversight over the VDA industry:

- **Standardization of Norms**: Extending rules applicable to banks and financial institutions to VDAs for transparency and oversight.
  - VDA platforms are now mandated to follow KYC norms and report to the Financial Intelligence Unit-India (FIU-IND).
- **Clear Legal Framework**: Establishing a clear legal framework to define and regulate VDAs.
  - Proposed Cryptocurrency and Regulation through Official Digital Currency Bill.
- **Consumer Education**: about the risks and responsibilities associated with VDAs by regulatory bodies in India.
- **Building Technological Expertise**: within regulatory bodies to oversee the VDA industry.
- **Ensuring Anti-Money Laundering (AML) Compliance**:

- Recently, the Ministry of Finance has extended the Anti-money Laundering provisions to Virtual Digital Assets (VDA) businesses and service providers.

- **Monitoring and Enforcement**: Regular audits and inspections of VDA platforms in India.
- **Tax Reconsideration**: Aligning VDA taxes with other asset classes to reduce tax arbitrage and retain capital within the country.
    - Reduce the size of the grey economy for VDAs.
- **Cross-Border Collaboration**: Engaging in international collaboration to address cross-border challenges.
    - India is engaging with other G20 countries to harmonize VDA regulations.

Regulating VDAs is a complex task that requires balancing innovation, consumer protection, and financial stability. India has the opportunity to take a leadership role in shaping the global regulatory landscape for VDAs. With the right regulatory framework, India can harness the potential of VDAs while mitigating the associated risks.

8. Self Help Groups / Lakhpati Didi Scheme

Why is it in news?

In the recent Independence Day address, the PM unveiled an initiative aimed at empowering women's self-help groups (SHGs) across India. The scheme aims to provide drones for women SHGs.

What are Self-Help Groups?

Self-help groups (SHGs) are voluntary associations of people who come together to address common challenges and improve their living conditions. They are typically found in communities and share some key characteristics:

- **Membership:** SHGs consist of people from similar social and economic backgrounds, often facing similar issues like poverty, lack of access to credit, or limited resources.
- **Self-Governance:** These groups are self-managed by their members, who collectively decide on activities, goals, and resource allocation.
- **Savings and Microfinance:** A core aspect of SHGs is the practice of regular saving small amounts of money. This pooled money can then be used to provide loans to members for various purposes, promoting financial inclusion and self-reliance.
- **Mutual Support:** Beyond financial aid, SHGs offer a valuable support system. Members can share knowledge, experiences, and encouragement, fostering a sense of community and empowerment.

What is the significance of SHGs?

- **Poverty Alleviation:**
    - **Microfinance and Credit Access:** SHGs provide access to microfinance for members, enabling them to start small businesses, invest in livelihood opportunities, and break the cycle of poverty.

- **Income Generation and Savings:** Through group savings and internal lending, SHGs empower members to save money and invest in income-generating activities, improving their financial security.

- **Women's Empowerment:**
  - **Social Support and Decision-Making:** SHGs, often women-led, provide a safe space for women to discuss issues, share experiences, and gain confidence in making decisions.
  - **Economic Independence:** Access to credit allows women to start and manage businesses, fostering financial independence and challenging traditional gender roles.

- **Social Development and Community Building:**
  - **Collective Action and Advocacy:** SHGs act as a collective voice for marginalized communities, advocating for better social services, infrastructure development, and addressing social evils.
  - **Improved Social Capital:** By encouraging collaboration and trust within the group, SHGs strengthen social networks and foster a sense of belonging within communities.

- **Financial Inclusion:**
  - **Reaching the Unbanked:** SHGs provide a pathway for people without access to formal banking institutions to participate in the financial system through saving and internal lending mechanisms.
  - **Financial Literacy:** SHGs promote financial literacy among members by encouraging regular savings, budgeting, and responsible borrowing practices.

- **Improved Quality of Life:** Through increased income, better access to education and healthcare, and participation in social development initiatives, SHGs contribute to a significant improvement in the quality of life for members and their families.

What is the Lakhpati Didi Scheme?

The scheme aims at empowering women in rural India and improving their economic standing.

Key features:

- **Goal:** Create "Lakhpati Didis" (women earning over Rs. 1 lakh annually) in villages, contributing to poverty alleviation.
- **Target Group:** Women members of Self-Help Groups (SHGs).
- **Empowerment Strategies:**
  - **Skill Training:** Equip women with skills like LED bulb making, plumbing, and drone operation.
  - **Drone Technology:**

- Provide drones to SHGs for agricultural activities.
- Train women in operating and repairing drones.

- **Increased Income Generation:** Equip women with skills and tools to earn more than Rs. 1 lakh per year.

The Lakhpati Didi Scheme focuses on empowering rural women through financial independence and skill development. By integrating technology like drones and training in diverse fields, the scheme aims to create a sustainable path for women's economic growth and contribute to the transformation of the rural landscape.

9. Household Consumption Expenditure Survey (HCES)

Why is it in news?

The National Sample Survey Office (NSSO), MoSPI has released the Household Consumption Expenditure Survey (HCES), 2022-23, conducted from August 2022 to July 2023.

What is the Household Consumption Expenditure Survey?

- The HCES, conducted by the National Sample Survey Office (NSSO), collects data on Indian households' spending patterns.
- NSSO has been conducting household consumption expenditure surveys once every five years since 1972-73.
- This survey provides vital insights into various socio-economic indicators, including consumption patterns, poverty levels, and income distribution, thereby playing a crucial role in formulating and refining economic policies in India.

What are the Highlights of the HCES 2022-23?

- **Increase in Monthly Per Capita Consumption Expenditure (MPCE):**
  - The average estimated MPCE stood at Rs 3,773 in rural India and Rs 6,459 in urban India for the year 2022-23.
  - Urban and rural households saw a significant increase of 33.5% and 40.4% in MPCE since 2011-12.
- **Food Expenditure:** Food items remain a major expense, with 46% of rural and 39% of urban household expenditure dedicated to food. The survey also reflects a decrease in spending on cereals and pulses across both rural and urban households, potentially indicating dietary shifts.
- **Shifting Consumption Patterns:** The decline in food spending as a proportion of total expenditure suggests rising incomes and changing consumption patterns. Households are allocating more resources towards non-food items like medical care, clothing, education, and entertainment.
- **Distribution of MPCE:** A significant disparity exists between the bottom and top 5% of the population in both rural and urban areas.

- **State-wise Variations:**
    - Sikkim boasts the highest MPCE and Chhattisgarh the lowest MPCE.
    - Meghalaya (83%) and Chhattisgarh (82%) exhibit the highest rural-urban MPCE disparity amongst states.
- **UT-wise Variations:** Chandigarh leads with the highest MPCE and Ladakh and Lakshadweep have the lowest MPCE for rural and urban areas respectively.

What is the Significance of HCES?

- **Poverty Assessment and Reduction**: HCES provides essential data on household expenditure, crucial for estimating poverty levels accurately. Policymakers can tailor social security measures, ensuring targeted and efficient poverty alleviation.
    - India's per capita monthly consumption expenditure witnessed an average annual growth of 3.1% for rural areas and 2.7% for urban areas between 2011-12 and 2022-23.
- **Inflation Measurement and Management**: detailed account of household spending patterns plays a key role in recalibrating the Consumer Price Index (CPI), a primary gauge for inflation. This adjustment ensures accurate inflation targeting.
    - The 2022-23 HCES showed shifts in consumer spending away from food towards durable goods and services necessitating updates to CPI weights.
- **Monetary Policy Guidance**: Trends in household consumption inform the Reserve Bank of India's monetary policy, particularly in managing liquidity, setting interest rates, and overall financial stability objectives.
- **Addressing Income Inequality:** The survey's insights into income disparity, especially the vast spending gap between the wealthiest and poorest, underscore the need for redistributive economic policies like progressive taxation and enhanced social security benefits.
    - The Monthly Per Capita Consumption Expenditure **(**MPCE) of the top 5% in urban areas is 941% higher than the bottom 5%.
- **Reducing Rural-Urban Disparities**: The survey offers differentiated insights into rural versus urban consumption, aiding in the development of policies that address the unique needs of each demographic.
    - The survey reveals a decreasing rural-urban spending gap in India, yet significant disparities remain, with the largest gaps in Meghalaya and Chhattisgarh.
- **Social Welfare Program Adjustment**: The imputed values of items received free through social welfare programs offer insights into the real impact of social welfare benefits on household consumption, guiding their refinement.

What are the Limitations of HCES (Household Consumption Expenditure Survey) Data?

- **Comparability Issues Across Surveys**: The changes in methodology, item coverage, and data collection techniques in HCES 2022-23 compared to previous surveys may complicate direct comparisons.

- **Discrepancy Between NSSO and National Accounts Statistics (NAS) Consumption Data**: complicates the use of HCES data for calculating poverty ratios and adjusting the CPI, which are crucial for informed economic policy-making.

- **Poor Data Quality:** The results of the last survey, conducted in 2017-18, were withheld over data quality issues.

As India continues on its path of economic development, the insights derived from the HCES will remain indispensable in crafting policies that are responsive to the changing dynamics of its economy and society.

10. Draft National Policy on Official Statistics

Why is it in news?

Ministry of Statistics and Programme Implementation has released the revised draft for its National Policy on Official Statistics (NPOS), with a focus on creating a cohesive framework for the use of big data analytics, artificial intelligence (AI) and machine learning in creating and releasing economic and social statistics.

What are Official Statistics?

- Official statistics are data sets compiled by government agencies at all levels (municipal, state, and central) from various sources like surveys, administrative records, and other forms of data collection.

- These statistics are published regularly and aim to provide an accurate and comprehensive picture of the country. Their main purpose is to support the government in making informed decisions on economic and social policies.

- Additionally, they act as a resource for the public and researchers to assess government programs and engage in informed discussions.

What is the Need for a NPOS?

- **Data Collection Issues:** Faulty sampling frames, inappropriate survey designs, and poorly selected respondents can lead to unreliable and unrepresentative data.

- **Data Delays and Inconsistencies:** make it difficult to track trends and create a clear picture of the socio-economic situation. The sporadic nature of data release for sensitive topics like caste census further raises concerns.

- **Discrepancies Between Agencies:** Lack of uniformity in data collection methods across different government agencies leads to conflicting data sets. This creates confusion and makes it difficult to get a holistic view.

- **Data Quality and Accuracy:** There have been documented instances of data inaccuracies, such as inflated export figures or underestimation of household consumption. This raises questions about the overall quality of official statistics.

- **Manipulation and Distortion:** There are concerns about potential manipulation and distortion of data by the government, especially in the context of "post-truth politics." This undermines public trust in official statistics.

What are the objectives of the draft NPOS?

- **Meeting Evolving Data Needs:** The data demands from users are growing, requiring the statistical system to adapt and leverage digital capabilities.
- **Embracing Big Data:** The NPOS aims to capture the vast amount of available big data and integrate it with traditional socio-economic data collection methods.
- **Incorporating New Technologies:** The policy emphasizes utilizing Artificial Intelligence and Machine Learning to improve efficiency and accuracy in data processing and analysis.
- **Addressing Digital Transformation:** The NPOS acknowledges the need to adapt to the changing digital landscape and design a future-proof statistical system.
- **Strengthening Institutions:** The existing system needs improvement to meet the data requirements of a rapidly changing economy and enable timely monitoring and policy interventions.
- **Ensuring Coordination:** The policy aims to establish a clear framework for coordination between central and state/UT statistical systems.

What are the thrust areas of the draft NPOS?

- **Integrated Data System (IDS):** This involves creating a central platform for storing, managing, and analyzing data from various sources. It aims to improve efficiency, timeliness, and accessibility of official statistics.
- **Optimizing Use of Administrative Data:** The policy encourages leveraging existing administrative data (e.g., tax records, land records) to reduce survey burden and improve data coverage.
- **Focus on Core Official Statistics:** The policy identifies critical statistics (e.g., GDP, price indices) and emphasizes ensuring their quality, timeliness, and adherence to standards.
- **Innovation in Surveys:** The policy encourages exploring new survey methods and integrating administrative data with surveys to address data gaps and reduce costs.
- **Continuous Improvement of Data Quality:** The policy emphasizes maintaining high-quality data through adherence to standards, regular reviews, and transparency in data collection methods.
- **Enhancing Statistical Coordination:** The policy promotes collaboration between central and state governments for data sharing, avoiding duplication, and implementing statistical guidelines.
- **Capacity Building for Statistical Officials:** The policy focuses on training and upskilling statistical personnel in using new technologies, big data analytics, and best practices.
- **Strengthening State Statistical Systems:** The policy acknowledges the importance of state-level reforms and aims to improve statistical capacity and infrastructure in states and UTs.

What are the concerns associated with the draft NPOS?

- **Data Privacy Concerns:** The policy might not adequately address data privacy concerns. With a focus on integrating data from various sources, there's a risk of user data being misused or accessed by unauthorized personnel.

- **Centralization vs Decentralization:** The policy emphasizes strengthening the central statistical system (MoSPI) and coordination with states. This could lead to a more centralized approach, potentially neglecting the needs and capacities of individual states.

- **Focus on Technology over Quality:** The emphasis on using new technologies like AI and Big Data might overshadow the importance of ensuring data quality, accuracy, and proper collection methods.

- **Limited Scope of "Core Statistics":** The policy focuses on core statistics like GDP, but it might neglect the importance of collecting data on other vital social and environmental issues.

The draft NPOS can pave the way for a robust and trustworthy data infrastructure that empowers evidence-based decision making across India.

11. K Shaped economy recovery

Why is it in news?

Given the decreasing income inequality in India (according to a study by the Economic Research Department of the State Bank of India), the ongoing debate about a K-shaped recovery of the domestic economy post-pandemic seems flawed and biased.

What is a K-shaped Economic Recovery?

The COVID-19 pandemic disproportionately affected different segments of the economy. A K-shaped economic recovery refers to a scenario where different sectors of the economy experience diverging fates following a recession. The "K" shape represents this divergence:

- **Upper arm of the K:** Represents sectors that rebound quickly and experience strong growth after the recession. This might include industries like technology, e-commerce, or healthcare that benefited from pandemic-related changes in consumer behavior.

- **Lower arm of the K:** Represents sectors that continue to struggle or even decline after the recession. This could encompass industries like tourism, hospitality, or brick-and-mortar retail that were heavily impacted by lockdowns and social distancing measures.

What are the Key characteristics of a K-shaped recovery?

- **Uneven impact:** Certain industries and social groups benefit significantly from the recovery, while others continue to suffer.

- **Widening inequality:** The gap between the rich and poor can widen as some segments of the population see their economic prospects improve, while others face ongoing challenges.

- **Long-term consequences:** A K-shaped recovery can have lasting effects on the overall economic structure and social fabric of a nation.

What are the evidences pointing to a K-shaped Economic Recovery in India?

- **Widening Income Gap:** The pandemic exacerbated income inequality. The income of the poorest 20% of Indian households plunged by 53% during the pandemic year, while the richest 20% saw a significant increase (39%).

- **Shallow Private Capex Revival:** The data on project approvals by banks suggests a focus on government infrastructure projects rather than a revival in private sector investment, particularly in manufacturing. This limits job creation in crucial sectors.

- **Declining Household Savings:** The decline in net financial savings of households points towards slowing or declining real incomes, rather than increased confidence. This suggests consumption might be driven by debt rather than rising income.

- **Low Real Per Capita Income Growth:** Calculations based on savings data reveal a very low real per capita income growth (1.7%), potentially the lowest in 40 years. This contradicts a robust economic recovery at the household level.

- **Job Composition and Quality:** The decline in unemployment might not represent genuine improvement. The rise in self-employment and rural construction work could be due to a lack of better alternatives (disguised unemployment). Additionally, a shift towards lower-paying sectors like agriculture indicates a decline in job quality.

- **Stagnant Real Wages:** The estimated average worker income shows no growth in real terms (after adjusting for inflation), despite rising consumption expenditure. This suggests households are consuming more despite stagnant income, potentially through increased debt.

- **Muted Consumer Demand:** Despite strong GDP figures, certain consumer sectors show muted demand, particularly those catering to the "fat lower arm" of the K-shape (mass consumers). This suggests a lack of disposable income among a large segment of the population.

What are the arguments against a K-shaped Economic Recovery in India?

The State Bank of India (SBI) report argues against the notion of a K-shaped recovery in India, highlighting several trends that suggest a more broad-based economic growth:

- **Increased government spending:** Government stimulus packages and social welfare programs might be mitigating the severity of the downturn for vulnerable populations, preventing a sharper decline in living standards.

- **Decreasing Income Inequality:**

  - The Gini coefficient, a measure of income disparity, shows a decline from 0.472 to 0.402 between FY14 and FY22, indicating narrowing income gaps.

  - Taxpayer data suggests significant upward mobility, with 36.3% of taxpayers shifting from lower to higher income brackets.

  - Income disparity among low earners (less than ₹3.5 lakhs) has decreased significantly.

- **Growth in Business and Individual Income:**

  - The report highlights a rise in the income pattern of MSMEs as formalization drives bring them into the tax net.

- Many micro-sized firms have transitioned into larger categories, indicating growth and integration into larger value chains.
- Individual weighted mean income has risen substantially (₹3.1 lakhs to ₹11.6 lakhs) between FY14-FY21, reflecting income growth across various brackets.

- **Rising Female Labor Force Participation:**
  - PLFS data shows a significant increase in female labor force participation (23.3% in 2017-18 to 37% in 2022-23), suggesting more women are contributing to the economy.
- **Positive Consumption Trends:**
  - Consumption by the bottom 90% of the population has increased, with an estimated additional ₹16 lakh crore expected to shift to this segment by 2030.
  - The rising popularity of food ordering platforms across various regions is seen as an indicator of improved spending power across income levels.

The long-term impact of the pandemic on the Indian economy is still unfolding. Limited data availability for informal sectors makes it challenging to get a complete picture of the recovery's shape.

12. IMF Bailout

Why is it in news?

Sri Lanka secured a $3 billion bailout from the International Monetary Fund amid the worst economic crisis the island nation has faced since independence.

What is an IMF Bailout?

- An IMF bailout involves providing financial assistance to countries facing severe economic challenges to prevent bankruptcy.
- It aims to stabilise the country's economy, help meet external debt obligations, buy essential imports, and support the exchange value of the currency.
- Sri Lanka and Pakistan's recent currency devaluation and inflation are examples of crises leading to bailout requests.

Why do countries seek an IMF Bailout?

- **Macroeconomic Risks**:
  - Economic instability (high inflation, economic contraction)
  - Balance of payments crisis (insufficient foreign exchange reserves)
- **Currency Crises**:
  - Rapid currency depreciation

- Pressures on fixed exchange rates leading to reserve depletion

- **Debt Servicing Challenges**:
  - Difficulty meeting external debt obligations
  - High public debt levels leading to unsustainable fiscal situations

- **Economic Policy Failures**:
  - Inappropriate fiscal policies (excessive spending, weak revenue collection)
  - Ineffective monetary policies
  - Structural weaknesses in the financial system and public sector

- **External Shocks**:
  - Global financial crises
  - Natural disasters and pandemics disrupting economic activities

What are the Conditions Applicable to an IMF Bailout?

- **Structural Reforms**:
  - **Fiscal Transparency**: Improving government financial reporting and accountability to ensure more efficient use of public funds.
  - **Tax Reforms**: Overhauling tax systems to increase revenue, broaden the tax base, and improve tax compliance.
  - **Reforms in State-Owned Enterprises**: Restructuring or privatising state-owned enterprises to enhance their efficiency and reduce the financial burden on the state.

- **Macroeconomic Policy Adjustments**:
  - **Monetary and Credit Aggregates**: Implementing policies to control inflation and regulate the supply of money and credit in the economy.
  - **International Reserves**: Building and maintaining adequate levels of foreign exchange reserves to manage external shocks and currency volatility.
  - **Fiscal Balances**: Achieving sustainable budget deficits and public debt levels through fiscal consolidation measures.
  - **External Borrowing**: Managing external debt levels to ensure they remain within sustainable limits and do not pose a risk to economic stability.

- **Economic Stability Measures**:
  - **Exchange Rate Policies**: Adopting flexible exchange rate policies to maintain competitiveness and avoid currency overvaluation.
  - **Financial Sector Reforms**: Strengthening financial sector regulation and supervision to

ensure the stability and soundness of financial institutions.

- **Trade and Investment Policies**: Liberalising trade and investment policies to promote economic growth and integration into the global economy.

- **Social and Institutional Reforms**:
    - **Governance and Anti-Corruption Measures**: Implementing measures to improve governance, reduce corruption, and strengthen institutional capacity.
    - **Labour Market Reforms**: Adjusting labour market policies to increase employment, productivity, and wage flexibility.

What are the pros and cons of taking an IMF Bailout?

Pros

- **Economic Stability**:
    - Ensures the survival of essential industries and economic systems.
    - Restores investor and market confidence.
- **Technical Expertise**:
    - Provides guidance on implementing necessary economic reforms.
    - Strengthens economic policies and institutions.

Cons

- **Austerity Measures**:
    - Leads to reduced government spending and higher taxes.
    - Often results in public unrest and social inequalities.
- **Dependency and Reputation Risk**:
    - Creates dependency on external funding.
    - Harms the country's reputation among investors.

Balancing the immediate benefits of an IMF bailout with its long-term implications is crucial for countries seeking to navigate economic turmoil and achieve lasting stability.

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13. National Multidimensional Poverty index

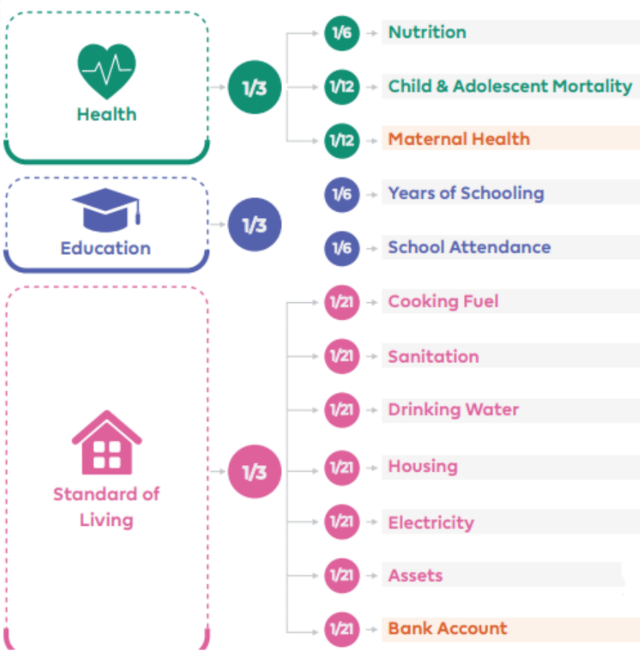
Why is it in news?

According to the NITI Aayog discussion Paper titled-'Multidimensional Poverty in India since 2005-06', India has experienced a significant reduction in multidimensional poverty from 29.17% in 2013-14 to 11.28% in 2022-23. Approximately 24.82 crore people have escaped multidimensional poverty in the last nine years.

What is the National Multidimensional Poverty index?

- It is a measure of poverty that considers multiple deprivations that individuals experience simultaneously.
- **Dimensions:** It measures poverty across three dimensions: Health, Education, and Standard of Living. These dimensions are represented by 12 indicators, including Nutrition, Child and Adolescent Mortality, Maternal Health, Years of Schooling, School Attendance, Cooking Fuel, Sanitation, Drinking Water, Electricity, Housing, Assets, and Bank Accounts.
- **Methodology:** The MPI's methodology is based on the Alkire and Foster (AF) method, which identifies individuals as poor if they experience deprivations in at least one-third of the weighted indicators. This method provides a comprehensive view of poverty, going beyond income-based measures.
- **Sustainable Development Goals (SDGs):** The indicators used in the MPI are aligned with the Sustainable Development Goals (SDGs), making it a relevant tool for tracking progress towards these global goals.
- **Complement to Monetary Measures:** The MPI complements monetary poverty measures by providing a more nuanced understanding of poverty. It captures deprivations that are not solely related to income, such as access to education and healthcare.
- **National vs. Global MPI:** The National MPI covers 12 indicators, while the global MPI covers 10 indicators. This indicates that the National MPI may provide a more detailed assessment of poverty specific to the country's context.

Indicators and their weights



- **Policy Implications:** The MPI can help policymakers identify the most deprived populations and design targeted interventions to address their specific needs. It provides a more holistic view of poverty, allowing for more effective poverty reduction strategies.

What are the key highlights of the discussion paper?

- **Decline in Multidimensional Poverty**: India reduced multidimensional poverty from 29.17% (2013-14) to 11.28% (2022-23), lifting about 24.82 crore people out of poverty.
- **State-wise Progress**: States like Uttar Pradesh, Bihar, Madhya Pradesh, and Rajasthan saw significant poverty reduction. Uttar Pradesh led with 5.94 crore people escaping poverty.
- **Improved Indicators**: All 12 MPI indicators, including health, education, and living standards, showed improvement.
- **Severity of Deprivation**: Decline in Severity of Deprivation (SoD) slowed slightly between 2015-16 and 2019-21 but accelerated in reducing the share of MPI poor out of the total population.
- **SDG Target**: India is likely to achieve SDG Target 1.2, aiming to reduce poverty by half before 2030, especially in standard of living indicators like cooking fuel, sanitation, and bank access.

Which initiatives have contributed significantly for the decline?

- **Poshan Abhiyan and Anemia Mukt Bharat**: These initiatives have improved healthcare access, leading to decreased deprivation, particularly in health indicators.
- **National Food Security Act and TPDS**: The Targeted Public Distribution System, covering over 81 crore beneficiaries, has ensured food security, reducing poverty linked to hunger.
- **Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY)**: The extension of free food grain distribution for five years shows the government's commitment to poverty alleviation.
- **Health and Sanitation Programs**: Programs addressing maternal health, Ujjwala Yojana for clean cooking fuel, Saubhagya for improved electricity, and campaigns like Swachh Bharat and Jal Jeevan Mission have improved living conditions.
- **Financial Inclusion and Housing**: Pradhan Mantri Jan Dhan Yojana has promoted financial inclusion, while PM Awas Yojana has provided safe housing, both contributing to poverty reduction.

Overall, the National MPI is a comprehensive measure of poverty that considers various dimensions of deprivation, providing a more nuanced understanding of poverty in India.

GOVERNMENT BUDGETING

14. Budget 2024

Why is it in news?

The Finance Minister, Ms Nirmala Sitharaman presented the Interim Budget for 2024-25 on February 1, 2024.

What is an Interim Budget?

- An interim budget is a financial statement presented by the government outlining anticipated income and expenditure for a temporary period, typically before general elections, allowing the incoming government to frame a detailed budget according to its policies and priorities.
- It ensures the continuity of government operations and fiscal management during the transitional period, preventing financial paralysis.
- Similar to a regular budget, it includes estimates of revenue and expenditure but usually avoids major policy changes or new proposals.
- A key feature is the "Vote-on-Account," which seeks Parliament's approval for the government's expenditure for a few months.

What are the Key Highlights of the Interim Budget 2024-25?

- **Expenditure**: Total estimated expenditure: Rs 47,65,768 crore, a 6% increase from the revised estimate of 2023-24.
    - Interest payments constitute 25% of total expenditure and 40% of revenue receipts.
- **Receipts**: Estimated receipts (excluding borrowings): Rs 30,80,274 crore, up 12% from the revised estimate of 2023-24.
    - Significant increase in tax revenue by 12% over the previous year.
- **GDP Growth**: Nominal GDP growth rate projected at 10.5% for 2024-25.
- **Deficits**:
    - Revenue deficit targeted at 2% of GDP, down from 2.8% in 2023-24.
    - Fiscal deficit targeted at 5.1% of GDP, reduced from 5.8% in 2023-24.
- **New Schemes**: Allocation of Rs 70,449 crore for new schemes under the Department of Economic Affairs, aimed at capital expenditure.
- **Tax Proposals**:
    - No changes in direct and indirect tax rates.
    - Extension of tax benefits to startups, sovereign wealth funds, pension funds, and certain IFSC units until March 2025.

What are the Policy Initiatives of the Interim Budget?

- **Agriculture**: Encouragement of investment in post-harvest activities, expansion of Nano DAP fertiliser application, support for dairy farmers, and enhancement of the PM Matsya Sampada Yojana to boost aquaculture productivity and seafood exports.

- **Railways**: Implementation of three major economic railway corridor programmes and upgrading of 40,000 rail bogies to Vande Bharat standards.

- **Housing**: Construction of an additional two crore houses under Pradhan Mantri Awas Yojana-Grameen and a new housing scheme for the middle-class.

- **Health**: Promotion of cervical cancer vaccination for girls aged 9-14, rollout of the U-WIN platform for immunisation management, and extension of Ayushman Bharat healthcare cover to ASHA and Anganwadi workers.

- **Energy**: Rooftop solarisation of one crore households, phased blending of compressed biogas in CNG and PNG, and installation of 100 metric tonnes of coal gasification and liquefaction capacity by 2030.

- **Environment**: Strengthening EV manufacturing and charging infrastructure, promotion of e-buses, launch of Blue Economy 2.0 scheme, and introduction of environmentally friendly alternatives like biodegradable polymers and bio-plastics.

- **Demographic Changes**: Formation of a high-powered committee to address challenges arising from rapid population growth.

- **Research**: Establishment of a Rs 1 lakh crore corpus to support private sector research and innovation with long-term, low-interest loans.

What are the provisions related to Subsidies, Schemes and Welfare?

- **Total Subsidies:** Estimated at Rs 4,09,723 crore for 2024-25, a 7% decrease from the revised estimate of 2023-24.

  - **Food Subsidy:** Rs 2,05,250 crore, a 3.3% decrease from 2023-24. The PMGKAY, which provided additional foodgrains during COVID, ended in December 2022.

  - **Fertiliser Subsidy:** Rs 1,64,000 crore, a 13.2% decrease from the revised estimate of 2023-24, due to reduced international raw material prices.

  - **Other Subsidies:** Includes interest subsidies and LPG subsidies, with a 3% increase from the revised estimate of 2023-24.

- **Expenditure on Schemes**

  - **MGNREGS:** Highest allocation at Rs 86,000 crore, maintaining the same level as the revised estimate for 2023-24.

  - **Pradhan Mantri Awas Yojana:** Second highest allocation at Rs 80,671 crore, a 49.1% increase from 2023-24, primarily due to adjustments in the rural component.

- **Jal Jeevan Mission:** Rs 70,163 crore, a slight increase of 0.2% from the revised estimate of 2023-24.
- **PM KISAN:** Allocated Rs 60,000 crore, the same as the revised estimate for 2023-24.
- **Loans**
- **Special Interest-Free Loans to States for Capital Expenditure:** Budgeted at Rs 1,30,000 crore for 2024-25.

* **Welfare Expenditure:**
  - **Welfare of Women and Children:** Rs 4,19,183 crore for 2024-25, an 18.6% increase from the revised estimate of 2023-24. This includes:
    - **Women's Welfare:** Increased allocation due to the Pradhan Mantri Awas Yojana, which mandates female ownership or co-ownership of houses.
    - **Children's Welfare:** Higher allocation towards school education.
  - **Scheduled Caste and Scheduled Tribe Sub-Plans and Schemes:** Included within the broader welfare expenditure, with specific allocations aimed at improving socio-economic conditions in these communities.

AGRICULTURE & ALLIED SECTORS

15. Fertilizer Sector in India

Why is it in news?

The current detailed cost monitoring and price control regime in urea will be extended to all other subsidised fertilizers. While urea is a controlled fertilizer, the likes of DAP, MOP and complexes will also practically cease to be "decontrolled" fertilizers. This takes the fertilizer industry back to the full-control era before the introduction of the nutrient-based subsidy (NBS) system in April 2010.

What is the status of Fertilizer usage in India?

- **Moderate growth:** Overall fertilizer consumption in India has seen a moderate increase in recent years, with a marginal rise of 0.2% in 2022-23.
- **Shifting composition:** Urea remains the dominant fertilizer, but its use has plateaued. Consumption of other fertilizers like DAP (Diammonium Phosphate) is increasing.
- **Regional disparities:** Fertilizer usage varies significantly across regions. Some areas show promise in efficient fertilizer application, while others might require interventions to promote balanced use.

What are the challenges associated with the fertilizer sector?

- **Subsidy Burden**: The government provides significant subsidies on fertilizers, leading to a huge financial burden.
  - The revised estimate for the fertiliser subsidy for FY24 is Rs 1.88 lakh crore.
- **Imbalanced Use**: There is a tendency towards imbalanced use of fertilizers, with a focus on nitrogenous fertilizers like urea, neglecting phosphatic and potassic fertilizers.
  - According to NITI Aayog, the average NPK ratio in India was 8:3:1 in 2015-16, which is far from the recommended ratio of 4:2:1.
- **Quality Control Issues**: Ensuring the quality of fertilizers, especially in terms of nutrient content and effectiveness, remains a challenge.
  - Poor quality fertilizers can lead to crop damage and financial losses for farmers.
- **Supply Chain Constraints**: such as inadequate storage facilities, inefficient distribution networks, and transportation bottlenecks, affect farmers' access to fertilizers.
- **Lack of Awareness**: Many farmers lack awareness about the proper use of fertilizers, including the importance of soil testing and balanced fertilization.
- **Dependency on Imports**: India is heavily dependent on imports for phosphatic and potassic fertilizers, making the sector vulnerable to international price fluctuations and supply disruptions.

What are the implications of the imbalanced use of fertilizers?

- **For Agriculture:**
  - **Reduced Crop Yields:** Plants need a balanced combination of nutrients for optimal growth. If a crucial nutrient is missing or oversupplied, it can hinder the plant's ability to utilize other nutrients, leading to stunted growth and lower yields.
  - **Deteriorating Soil Health:** Excessive use of some fertilizers, like nitrogen, can acidify the soil, making it less hospitable for beneficial microorganisms and impacting long-term fertility.
  - **Increased Pest and Disease Susceptibility:** Imbalanced nutrient uptake can weaken plants, making them more susceptible to pests and diseases, leading to higher reliance on pesticides with potential environmental and health risks.
- **For the Environment:**
  - **Water Pollution:** Excess fertilizer runoff from fields can contaminate water sources like rivers and lakes. Nitrogen runoff can cause eutrophication, leading to excessive algae growth, oxygen depletion, and harm to aquatic ecosystems.
  - **Air Pollution:** Volatilization (conversion to gas) of some nitrogen fertilizers like ammonia can contribute to air pollution.
  - **Greenhouse Gas Emissions:** Production of nitrogen fertilizers often involves significant energy consumption, contributing to greenhouse gas emissions.
- **For Human Health:**
  - **Nitrates in Drinking Water:** Contaminated drinking water with high nitrate levels can pose health risks, especially for infants, causing a condition called methemoglobinemia (blue baby syndrome).

What are the measures taken to promote the balanced use of fertilizers?

- **Pradhan Mantri Kisan Samrudhi Kendra (PMKSK)**: Provides agri-inputs including fertilizers and testing facilities for soil, seeds, and fertilizers.
  - Aims to create awareness among farmers and convert retail fertilizer shops into PMKSK.
- **Pradhan Mantri Bhartiya Jan Urvarak Pariyojana (One Nation, One Fertiliser)**: Introduces single brand names for various fertilizers to eliminate confusion about quality and availability.
  - UREA, DAP, MOP, and NPKs are branded as BHARAT UREA, BHARAT DAP, etc.
- **Nutrient Based Subsidy (NBS)**: Initiated in 2010, applicable to 22 fertilizers (excluding Urea) to provide them at subsidized prices based on nutrient content.
  - Fortified fertilizers with secondary and micronutrients receive additional subsidy.
- **Subsidy on Phosphatic and Potassic Fertilisers (P&K)**: Announced annually by the Government to increase consumption of P&K fertilizers, aiming for an optimum NPK fertilization ratio.

- **Market Development Assistance Policy**: Promotes alternative fertilizers like green manure, organic compost in rural areas.
    - Encourages the use of solid/liquid slurry to reduce dependence on chemical fertilizers.
- **Soil Health Card**: Recommends fertilizers based on soil test results for 12 parameters, including macronutrients, micronutrients, and physical parameters.

Way Forward:

- **Improve Supply Chain Efficiency**: Upgrade storage and transportation infrastructure to reduce wastage and ensure timely availability of fertilizers.
    - Utilize technology such as GPS tracking and digital monitoring.
- **Promote Organic and Alternative Fertilizers**: Encourage the use of organic manures, biofertilizers, and green manure to reduce dependency on chemical fertilizers.
- **Invest in Research and Development**: to develop new, eco-friendly fertilizers and enhance the efficiency of existing fertilizers.
- **Strengthen Soil Health Management**: Establish more soil testing laboratories and encourage the use of precision farming techniques.
- **Policy Reforms**: Review and update fertilizer subsidy policies to ensure fiscal sustainability and promote balanced fertilization.

16. Grain Storage Plan in Co-operative Sector

Why is it in news?

In order to address the shortage of food grain storage capacity in the country, the Government of India has approved the “World’s Largest Grain Storage Plan in Cooperative Sector”, which is being rolled out as a Pilot Project in 11 states.

What are the problems associated with grain storage in India?

- **Inadequate Storage Facilities**: Lack of storage facilities, unscientific storage practices and inefficient transport mechanisms leads to spoilage and pest infestation, affecting 10-16% (12 to 16 million tons) of major cereal crops.
    - Around 30 million tonnes of food grains are stored across India using the open method. About 1.8 million tonnes of grain spoil during open storage.
- **Inefficient Government Supply Chain:** wastes significant portions of its stockpiles and allows unfair dealers to take undue advantage of its loopholes.
- **State Governments' Failure to Provide Basic Storage Facilities**: Lack of basic storage facilities in market yards affects farmers' earnings and grain quality.
- **Governance Issues in Agricultural Cooperative Societies:** such as elite capture and political interference, hinder storage infrastructure.

- **Poor Maintenance and Lack of Modernization in Existing Storage Infrastructure**: like FCI storage leads to inefficiency and fails to accommodate perishable commodities.
- **Inadequate Storage Capacity for Perishable Produce**: India has the storage capacity for only one-eighth of its annual perishable produce.
- **Compromise on Quality Affecting Nutrition Security**: Poor quality grains in the PDS due to low-quality storage infrastructure adversely affect nutrition security.

What is the Vision of the Grain Storage Plan?

- The Grain Storage Plan in the Co-operative Sector aims to revolutionize agriculture and the FMCG industry by establishing a robust storage infrastructure for grains and food products.
- **Increased Storage Capacity:** The primary objective is to double the existing storage capacity to 700 lakh metric tons for grains and food items.
- **Network of Integrated Storage Facilities:** The plan envisions establishing a nationwide network of integrated grain storage facilities managed by Primary Agricultural Credit Societies (PACS).
- **Strengthening PACS:** By enabling the creation of various agricultural infrastructure like decentralized godowns and Fair Price Shops at the PACS level, the plan aims to strengthen the economic condition of PACS.
- **Vision for PACS Participation:** The plan aspires for 100% participation by PACS across the country within the next few years, ultimately achieving the targeted storage capacity before 2027.
- **Enabling Mechanisms:**
  - **Financial support from NABARD:** PACS can access refinancing at a highly subsidized rate (around 1%) through the convergence of various existing government schemes.
  - **Convergence of Existing Schemes:** The plan leverages existing schemes like Agriculture Infrastructure Fund (AIF), Agricultural Marketing Infrastructure Scheme (AMI), Sub Mission on Agricultural Mechanization (SMAM) Pradhan Mantri Formalization of Micro Food Processing Enterprises Scheme (PMFME), etc. to provide PACS with subsidies and interest subvention benefits for infrastructure development.

What are the Benefits of Grain Storage Plan?

- **Reduce Post-Harvest Losses:** By creating ample storage capacity at the village level (Panchayat), the plan aims to significantly reduce post-harvest losses of grains and food products. This will lead to higher profits for farmers and also ensure better food security for the nation.
- **Lower Food Grain Handling and Transportation Costs:** PACS will function as both procurement centers and Fair Price Shops (FPS) under the plan. This eliminates the need for transporting food grains to centralized locations and back, leading to substantial cost savings.
- **Market Choice and Avoiding Distress Sales:** By gaining the flexibility to sell their produce based on market conditions and reach a wider market, farmers are no longer pressured into distress sales at lower prices.

- **Efficient Food Supply Chain:** By leveraging the extensive network of PACS across the country, the plan aims to bridge the gap between farm produce and consumer demand.

What are the Challenges that Need to be Tackled?

- **Non-Functional PACS:** A significant number of PACS (Primary Agricultural Credit Societies) are currently dysfunctional. This lack of operational capacity can hinder effective plan implementation.
  - Only about 63,000 out of 1 lakh PACS are currently operational in India.
- **Bureaucratic Complexity:** Coordinating and converging various government schemes involved in the plan can create intricate bureaucratic hurdles that could slow down progress.
- **Infrastructure and Technology Constraints:** Setting up modern storage facilities, particularly in rural areas with limited technological infrastructure, presents a challenge. Implementing digital solutions for efficient management might also be difficult.
- **Skilled Workforce Shortage:** The plan can generate local employment, but operating and managing advanced storage facilities requires skilled personnel. Bridging this skill gap is crucial.
- **Legacy Issues of Agricultural Cooperatives:** The historical inefficiency of agricultural cooperatives raises concerns about their ability to manage the storage infrastructure and financial responsibilities effectively.
- FPOs, being run as businesses with better governance structures, might be a more suitable alternative.

The Grain Storage Plan in the Co-operative Sector holds significant promise for improving food security, reducing wastage, and empowering farmers while creating a more efficient food supply system in India.

17. Indian Dairy Sector

Why is it in news?

To sustain high consumer demand and ensure a good income for farmers, focus needs to shift from hiking procurement prices to lowering production costs at the farm-gate.

What is the status of the Indian Dairy Sector?

- The White Revolution, also known as Operation Flood, transformed India from a milk-deficient nation into the world's largest milk producer.
- India's dairy sector is characterised by 'production by the masses' rather than 'mass production'.
- The sector contributes 5% to the national economy and provides direct employment to more than 80 million rural households.
- The value of the dairy business in India is expected to more than double from Rs13 lakh crore to Rs30 lakh crore by 2027.

What is the significance of the Dairy Sector?

- **Economic Contribution and Livelihood Support**: Dairy is a major component of the agricultural sector, contributing significantly to the GDP and providing a stable income for millions of rural households.
- **Nutritional Security**: Milk and dairy products are key sources of essential nutrients, contributing to the nutritional security of India's vast population.
- **Employment Opportunities**: The sector creates substantial employment opportunities in ancillary activities, including production, collection, processing, packaging, and distribution.
- **Women Empowerment**: Dairy farming significantly empowers women, who play a central role in milk production and dairy activities in rural areas.
- **Rural Development**: The sector stimulates growth in rural areas, reducing poverty and promoting sustainable agricultural practices.
- **Export Revenue**: India's dairy sector contributes to the economy by earning foreign exchange through the export of various dairy products.
- **Buffer Against Crop Failure**: Dairy provides a steady income that can help buffer farmers against the financial instability caused by crop failures or fluctuations in other agricultural markets.

What are the challenges faced by India's Dairy Sector?

- **Urbanization and Changing Consumption Patterns:** are increasing the demand for dairy products, necessitating higher production levels and diverse product offerings.
    - Milk emerged as the top food spend item in both rural and urban areas, according to Household Consumption Expenditure Survey, 2022-23.
- **Chronic Fodder and Feed Scarcity:** and high costs impact the cost-efficiency of milk production.
- **Milk Quality Concerns:** related to contamination and adulteration jeopardize consumer health and international market access.
- **Inadequate Cold Chain Facilities:** and high transportation costs lead to high spoilage rates and increased operational costs.
- **Lower Productivity of Indigenous Breeds:** compared to exotic breeds affect overall dairy output.
- **Global Competitive Pressures:** With the global dairy market becoming more competitive, there's a pressing need to enhance the quality and efficiency of Indian dairy products to maintain and expand international market share.
- **High Environmental Footprint:** of dairy farming, including greenhouse gas emissions and water usage, requires innovative solutions to ensure the sector's sustainability.
- **Technological Lag:** The gap in adopting modern technologies for dairy farming, processing, and supply chain management limits productivity and market responsiveness.

- **Climate Change Impacts:** cattle health and milk productivity, necessitating adaptation and resilience-building measures.

What are the Initiatives Undertaken to address the challenges?

- **National Dairy Plan (NDP):** Aims at increasing productivity through breed improvement and providing rural milk producers with greater access to the organized milk processing sector.
  - Implementation of the Progeny Testing and Pedigree Selection programs for high-yielding cattle breeds.
- **Primary Dairy Cooperative Societies:** The Ministry of Cooperation plans to establish 2 lakh more primary dairy cooperative societies.
  - While farmers globally receive only 40-50% of milk profits, Indian dairy cooperatives return 70% of the consumer price to them.
- **Rashtriya Gokul Mission:** Focuses on conserving and developing indigenous cattle breeds to enhance milk production and quality.
  - Establishment of Gokul Grams to foster elite indigenous breeds.
- **E-Pashu Haat Portal:** An online portal for connecting breeders and farmers, facilitating the trade of high genetic merit animals.
- **Fodder and Feed Development:** Ensuring the availability of high-quality fodder and feed to improve productivity.
  - Subsidies for fodder development projects and introduction of high-yielding fodder varieties.
- **Dairy Processing & Infrastructure Development Fund (DIDF):** Aimed at modernizing milk processing plants and infrastructure.
  - Financial assistance to cooperatives for setting up cold storage units and expanding processing capacities.
- **Training and Skill Development:** Providing training to farmers on modern dairy farming techniques and management practices by the National Dairy Development Board (NDDB).
- **Quality Assurance Mechanisms:** Implementing stringent quality control measures and certification for dairy products.
  - National Dairy Plan Quality Mark.
- **Encouraging Production and Promotion of Value-Added Products:** for domestic and export markets.
  - Support for setting up units for cheese, yogurt, and other dairy product manufacturing.

The White Revolution transformed India into a global dairy leader, but evolving challenges call for White Revolution 2.0 which seeks to secure the future of India's dairy sector, promote prosperity for farmers and ensure national nutritional security.

18. Farm Mechanization

Why is it in news?

According to the Standing Committee on Agriculture's report, India will need another 25 years more to achieve farm mechanisation level already achieved by Brazil.

What is the status of Farm Mechanization in India?

- As of August 2022, only 47% of agricultural activities are mechanized in India. This lags behind other developing countries like China (60%) and Brazil (75%).
- The Standing committee pointed out that reaching a mechanization level of 75-80% across the country might take approximately 25 years under current conditions.

Mechanisation level across crops					
Crop	Rice	Wheat	Pulses	Sugarcane	Overall
Level	53%	69%	41%	35%	47%

What is the need for Farm Mechanization in India?

Modernizing Indian agriculture through farm mechanization is crucial for several reasons:

- **Enhanced Productivity:** Machinery can significantly improve agricultural output by enabling faster and more efficient cultivation practices.
- **Reduced Drudgery:** Mechanization reduces the burden of manual labor, freeing farmers from tedious tasks and improving their working conditions.
- **Timely Farm Operations:** Machines allow farmers to complete crucial agricultural activities like sowing, harvesting, and irrigation more efficiently, ensuring optimal crop growth.
- **Crop Diversification:** Mechanization enables faster turnaround times between crop cycles, facilitating diversification and potentially increasing overall farm income.
- **Shift to Commercial Agriculture:** By reducing labor requirements and improving yields, mechanization can empower farmers to shift from subsistence farming to a more market-oriented approach, boosting their income potential.
- **Efficient Resource Utilization:** Mechanization can optimize the use of land, water, and other agricultural resources, leading to more sustainable practices.
- **Improved Social Outcomes:** Reduced drudgery and potentially higher incomes can contribute to improved living standards and social mobility in rural areas.

What are the challenges with Farm Mechanization in India?

While farm mechanization offers numerous benefits, its adoption in India faces significant challenges, particularly for small and marginal farmers:

- **Limited Access to Farm Power:** Many lack resources to acquire tractors or other power sources, hindering wider mechanization adoption.
- **High Investment Costs:** Farm machinery is expensive, posing a major financial burden for small farmers with limited resources.
- **Inapplicability for Small Landholdings:** Existing machinery might not be suitable for the small and fragmented landholdings typical of many Indian farms.
- **Inadequate After-Sale Services:** Limited access to proper maintenance and repair services in rural areas discourages investment in machinery.
- **Financing Constraints:** Commercial banks' reluctance to provide loans for farm equipment further restricts access for resource-limited farmers.
- **Labor Displacement Concerns:** The potential displacement of agricultural workers due to mechanization raises social concerns and necessitates measures for skilling and alternative employment generation.

What are the initiatives taken to promote Farm Mechanization?

The government recognizing the importance of farm mechanization and has undertaken several initiatives under the **Sub-Mission on Agricultural Mechanization (SMAM):**

- **Subsidies and Financial Assistance:** SMAM provides financial assistance of 50-80% of the cost of agricultural machinery to SMFs, making them more affordable.
- **Custom Hiring Centers (CHCs):** The scheme supports establishing CHCs that provide machinery rental services to farmers who cannot afford to own equipment individually. This facilitates access to technology for smallholders.
- **Hi-Tech & High-Value Farm Equipment Hubs:** These hubs promote the availability and accessibility of advanced machinery for specialized agricultural needs.
- **Farm Machinery Banks:** provide machinery on lease or rent to farmer groups or cooperatives, enabling collective use and reducing individual investment burdens.
- **Skill Development and Awareness:** programs include demonstrations, training sessions, and skill development initiatives to equip farmers with the knowledge and skills to operate and maintain machinery effectively.
- **Performance Testing and Certification:** The scheme ensures the quality and efficiency of agricultural machinery through designated testing centers.

Way Forward

The Standing Committee on Agriculture's report highlights key areas for improvement to accelerate farm mechanization, particularly for small and marginal farmers:

- **Prioritize Small Farms:** Tailor SMAM to address affordability challenges of small farmers. Promote development and use of low-cost machinery suitable for small landholdings.
- **Enhance Accessibility:** Increase awareness and utilization of CHCs and Farm Machinery Banks (FMBs) through wider publicity and mobile applications. Ensure proper functioning of CHCs and

FMBs at all levels.

- **Standardize Machinery:** Implement a policy for interchangeable parts in farm machinery to simplify maintenance and repairs for farmers.

- **Address Power Availability:** Increase average farm power per hectare and bridge the gap between states to ensure timely completion of agricultural tasks.

- **Data & Skill Development:** Conduct state-wise studies to assess mechanization gaps and develop targeted strategies. Establish Directorates of Agricultural Engineering in all states to address the shortage of personnel for training and guiding farmers.

FOOD PROCESSING AND RELATED INDUSTRIES

19. Food Processing Industry

Why is it in news?

- The food processing industry's contribution to agricultural exports has since grown to 23 % from 13 % in 2014 with India ranked 7th in the world in agricultural and processed food exports in 2022-23.
- In November in 2023, the Ministry of Food Processing Industries organized the Second edition of World Food India.

What is food processing and why is it important?

- Food processing is a key segment of the food supply chain that involves transforming raw agricultural and livestock materials into processed and value-added food products that are ready for consumption.
- This sector includes various activities, technologies, and processes designed to improve the safety, convenience, shelf life, taste, and nutritional value of food products.
- The importance of food processing lies in its ability to stabilize food supplies by reducing spoilage and waste, making seasonal foods available year-round, and enhancing food security.
- Additionally, it supports economic growth by generating employment opportunities, encouraging agricultural development, and promoting innovations that lead to more efficient food production and distribution systems.
- The food processing sector plays a vital role in meeting the evolving demands of global food markets while ensuring that consumers have access to safe and nutritious food.

What is the status of Food Processing Industry in India?

- **Significant Contributor:** The sector accounts for 13% of exports and 6% of industrial investment, significantly impacting the economy.
- **Foreign Investment Magnet:** Attracting substantial FDI (USD 4.18 billion from 2014-2020) reflects confidence in its future potential.
- **Job Creation Engine:** Projected to generate 9 million jobs by 2024, fostering employment opportunities.
- **Growing Consumer Base:** By 2030, India is expected to become the world's 5th largest consumer of food, highlighting a booming domestic market.
- **Sunrise Sector Status:** Recognized as a high-growth industry with immense potential for future development.
- **Output Growth Trajectory:** The sector's output is projected to surpass USD 600 billion by 2025-26, indicating a positive growth trend.

What are the challenges faced by the Food Processing Industry?

- **Low Processing Levels:** India is a major producer of agricultural products, but a large portion goes unprocessed. Processing levels for fruits and vegetables remain low (around 2-3%), leading to spoilage and value loss.

- **High Post-Harvest Losses:** Inadequate infrastructure for storage, transportation, and handling results in significant post-harvest losses, estimated at around 25-30% of production. This translates to economic losses and food insecurity.

- **Fragmented Supply Chain:** The presence of numerous small and marginal farmers creates a fragmented supply chain with inefficiencies. This makes it difficult to ensure consistent quality and meet the demands of large-scale processing units.

- **Limited Cold Chain Network:** The lack of a robust cold chain infrastructure, including refrigerated warehouses and transportation, hinders the preservation of perishable food items. This restricts the reach and marketability of processed products.

- **Inadequate Food Safety Standards:** Inconsistent adherence to food safety regulations can raise concerns about product quality and limit market access, especially for exports.

- **Limited Investment in R&D:** Underinvestment in research and development (R&D) hinders innovation in processing techniques, packaging solutions, and product development. This can make Indian products less competitive in the global market.

What are initiatives taken to promote Food Processing Industry?

- **Infrastructure Development:**
  - **Mega Food Parks Scheme:** Establishes modern food processing infrastructure with cold chain facilities, processing units, and common service centers to improve processing capacity and reduce wastage.
  - **Integrated Cold Chain and Value Addition Infrastructure Scheme:** Provides financial assistance for setting up cold chain facilities like storage units and refrigerated transportation, minimizing post-harvest losses.

- **Financial Incentives:**
  - **Production Linked Incentive (PLI) Scheme for Food Processing Industry:** Offers financial incentives to attract investments in targeted segments of the food processing industry, boosting production and exports.
  - **Pradhan Mantri Kisan Sampada Yojana (PMKSY):** Provides financial assistance for infrastructure development, creation of backward and forward linkages, and capacity building initiatives across the agriculture and food processing value chain.

- **Institutional Support:**
  - **Ministry of Food Processing Industries (MoFPI):** The dedicated ministry spearheads initiatives, formulates policies, and facilitates investments in the food processing sector.
  - **One District One Product (ODOP):** This initiative focuses on promoting and developing one unique food product from each district, leveraging local specialties, creating market opportunities and boosting exports.

- **Pradhan Mantri Formalization of Micro Food Processing Enterprises (PMFME) scheme:** The scheme aims to improve the competitiveness of existing individual micro-enterprises by encouraging them to formalize their operations.

- **Skill Development:**
  - **Skill India Mission:** Provides training programs to equip youth with the necessary skills and knowledge for processing, packaging, and quality control in the food processing sector.

Way Forward

- The future of India's food processing industry is bright with possibilities. Embracing cutting-edge technologies like smart hubs and nutraceutical innovations can revolutionize food production and cater to evolving consumer demands.
- Furthermore, minimizing waste through zero-waste processing and empowering local farmers with community processing centers promotes sustainability and rural development.
- By prioritizing these advancements alongside infrastructure improvements, India can unlock its true potential as a global leader in the food processing sector.

EFFECTS OF LIBERALIZATION ON THE ECONOMY

20. Exchange rate management in India

Why is it in news?

The International Monetary Fund has reclassified India's "de facto" exchange rate regime to "stabilized arrangement" from "floating" for December 2022 to October 2023.

What is Exchange rate management?

- Exchange rate management refers to the strategies and policies that a country's central bank or monetary authority employs to influence the value of its national currency against other currencies.
- The management of exchange rates is a critical component of a country's economic policy.

What are the Objectives of Exchange Rate Management?

- **Stabilize the Currency:** To prevent excessive volatility that can lead to economic uncertainty.
- **Control Inflation:** By managing the currency value, central banks can influence the cost of imports and exports, thus affecting inflation.
- **Enhance Competitiveness:** A competitively valued currency can make a country's exports cheaper and more attractive in the international market.
- **Attract Foreign Investment:** Stable and predictable exchange rates can attract foreign investors looking for a safe and profitable environment.

What are the different types of Exchange rate management Regimes?

- **Fixed Exchange Rate:** The value of the currency is pegged to another major currency or a basket of currencies. The central bank buys and sells its own currency to maintain the peg, stabilizing exchange rates but requiring significant reserves.
- **Floating Exchange Rate:** The value of the currency is determined by market forces based on supply and demand relative to other currencies. The central bank may intervene occasionally to stabilize the market or achieve specific economic objectives.
- **Managed Float:** A hybrid approach where the currency mostly floats, but the central bank intervenes regularly to steer the exchange rate in favorable directions based on predefined economic targets.

How is the Exchange rate managed in India?

India follows a managed floating exchange rate regime, also known as a "dirty float."

- **Market-Driven Adjustments:** The rupee's value is primarily determined by market forces such as trade flows and foreign investments.
- **RBI Intervention:** The Reserve Bank of India intervenes by buying or selling foreign currency

This is not aimed at maintaining any particular exchange rate level but to curb excessive volatility that could have adverse implications for economic stability.

- **Utilization of Forex Reserves:** are used strategically to manage the exchange rate and provide a sense of security against global economic shocks.

- **Policy Coordination:** Exchange rate management is coordinated with monetary policy to support overall economic stability.

- **Regulatory Framework:** Forex transactions are regulated under the Foreign Exchange Management Act (FEMA), 1999.

- **Liberalized Remittance Scheme:** Allows residents to remit money abroad within set limits, influencing demand and supply in the forex market.

India's approach is pragmatic, focusing on stabilizing the exchange rate without adhering strictly to either a fixed or a purely floating regime, allowing the flexibility needed to address both domestic and international economic conditions.

Why did the IMF Reclassify India's Exchange Rate Regime?

- IMF reclassified India's exchange rate regime from "floating" to "stabilized arrangement."

- The IMF believes the RBI's forex interventions, intended to curb volatility, exceeded levels necessary for maintaining orderly market conditions.

  - The rupee's narrow trading range (80.88-83.42) during this period suggests significant intervention.

- **Underlying Concerns:**

  - **Market Distortion:** Excessive intervention can distort market signals and hinder the exchange rate's ability to adjust to natural economic forces.

  - **Long-Term Sustainability:** While short-term stability may be achieved, relying heavily on intervention might not be sustainable in the long run.

  - **External Shocks:** The IMF emphasizes the importance of a flexible exchange rate as the first line of defense against external economic shocks.

- **RBI's Response:** The RBI strongly disagrees with the IMF's characterization. It argues that interventions were used to prevent excessive volatility not justified by economic fundamentals, promoting stability.

The disagreement between the IMF and RBI underscores the complexities of exchange rate management. While maintaining stability is crucial, it's vital to find a balance between intervention and allowing the exchange rate to reflect underlying economic realities.

21. Reforms in Multilateral Development Banks (MDBs)

Why is it in news?

During the G20 and IMF/World Bank Meetings in April, one of the issues high on the agenda was the reform of multilateral development banks (MDBs).

What are Multilateral Development Banks?

- MDBs are international financial entities formed by groups of countries, including both developed and developing nations. These institutions aim to support economic and social development in poorer member countries through the following key activities:
  - **Financing**: They provide loans, grants, and equity for development projects in sectors like transportation, energy, and urban infrastructure.
  - **Technical Assistance**: MDBs offer expert advice and consultancy to ensure effective project planning and execution.
  - **Development Goals**: The main purpose of MDBs is to promote sustainable growth and poverty reduction in developing countries.
  - **Examples**: World Bank, Asian Development Bank, African Development Bank, etc.
- These banks prioritize regional and sector-specific development challenges, focusing on long-term economic stability and infrastructure improvement.

What are the current challenges with MDBs?

- **Adapting to a Changing World:** The post-WWII landscape has evolved significantly. Emerging economies have different needs than traditional borrowers, and MDBs need to adapt their strategies to address contemporary development challenges like climate change and pandemics.
- **Questions of Effectiveness:** Concerns exist regarding MDB efficiency and effectiveness in achieving development goals. Slow bureaucracies hinder their ability to respond swiftly to evolving needs.
- **Representation and Voice:** Developing countries advocate for a greater say in MDB decision-making. The current structure favors developed nations with a larger share of voting rights.
- **Resource Constraints:** MDBs need to find innovative ways to mobilize more resources to finance critical development projects, particularly with the increasing needs of developing countries.
- **Short-Term vs. Long-Term Vision:** A shift is needed from project-specific funding to supporting long-term development plans of member countries. This includes a focus on sustainable development and climate resilience.

What are the proposed reforms in MDBs?

- **Alignment with National Development Priorities**: MDBs should operate in greater harmony with the developmental priorities of member nations, tailoring their strategies to support specific country needs effectively.

- Shift away from project-based funding.

- **Enhanced Private Sector Engagement**: This involves breaking away from traditional practices where private and sovereign financing arms operate in silos. Integrating private sector engagement more centrally could unlock additional financing and innovation.

- **Increased Coordination**: between various stakeholders, including national governments, private players, and international bodies would help in developing a unified vision for goals, policies, investments, and financing, mitigating coordination failures.

- **Risk Management**: Encouraging MDBs to take on more risk, particularly credit and policy risks, to attract and secure private sector investments. This shift requires MDBs to enhance their risk management frameworks to handle increased exposures effectively.

- **Scaling Up Financing**: With the need to significantly ramp up financing — targeting $390 billion by 2030 for climate and development projects.

The proposed reforms aim to create a more efficient, inclusive, and resource-rich MDB ecosystem. This reformed system can effectively address global challenges like climate change and support sustainable development in emerging markets.

INDUSTRY

22. Semiconductor Industry

Why is it in news?

The recent approval by the Indian government for establishing three semiconductor fabrication units (fabs) marks a significant development in the industry.

What is the status of Semiconductor Industry in India?

- **Limited Domestic Production:** India currently lacks a significant domestic manufacturing base for semiconductors. It relies heavily on imports to meet its chip requirements.
- **Design Strength:** India has a strong design ecosystem with a pool of skilled engineers. However, translating these designs into manufactured chips requires overseas fabrication facilities (fabs).

What is the significance of the Semiconductor Industry for India?

- **Enhancing Manufacturing**: Developing the semiconductor industry supports the 'Make in India' initiative, reducing dependency on imports and promoting self-reliance in critical technologies.
- **National Security**: A domestic semiconductor industry strengthens national security by ensuring self-sufficiency in essential components for defense and aerospace.
- **Critical for Expansion of Digital Infrastructure**: semiconductors enable advancements in everything from consumer electronics to industrial automation.
- **Ecosystem Development and Job Creation**: Building semiconductor facilities supports the broader electronics manufacturing ecosystem, aiding India's ambition to become a global manufacturing hub and boosting the employment landscape.
- **Innovation**: A focus on semiconductors accelerates domestic R&D and innovation across multiple high-tech sectors.
- **Supply Chain Stability**: Establishing local semiconductor manufacturing enhances supply chain resilience, vital for maintaining production during global disruptions.

What are the steps by the government to bolster semiconductor industry?

- **Promoting Domestic Production:**
  - **Establishment of Semiconductor Fabs:** The recent approvals for setting up three semiconductor fabrication units (fabs) involve an investment of Rs 1.26 lakh crore ($15.2 billion) including Rs 76,000 crore support under the 'Development of Semiconductors and Display Manufacturing Ecosystem' programme.
  - **Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS):** This scheme offers financial and infrastructural support to companies setting up semiconductor fabs, packaging facilities, and testing facilities in India.
  - **Design-Linked Incentive (DLI) Scheme:** This scheme provides financial incentives for companies engaged in the design and development of semiconductor chips.

- **Strengthening the Ecosystem:**
  - **Skill Development Initiatives:** The government is collaborating with educational institutions and industry players to develop a skilled workforce with expertise in chip design, fabrication, and testing.
  - **Relaxation of Regulatory Norms:** The government has simplified regulations and streamlined approvals to attract investments and expedite project implementation.
  - **Focus on Research & Development:** Government funding supports research institutions and universities to develop indigenous semiconductor technologies and materials.

What are the challenges that need to be addressed?

- **Competition from Lucrative Incentive Schemes:** India's close allies, the US and EU, offer more attractive financial incentives for chip manufacturing compared to India's plans. This could make India a less compelling destination for global chipmakers.
- **Technological Gap:** India's current focus on older chip fabrication nodes like 28nm lags behind leading players like TSMC, which are already working on advanced 3nm nodes. This could limit India's competitiveness.
- **Skilled Workforce Shortage:** While India boasts a strong talent pool for chip design, it lacks skilled workers with expertise in chip fabrication processes. This necessitates robust skill development initiatives to bridge the gap.
- **Limited Research & Development:** India currently lags in original research for advanced semiconductor design, which is crucial for future chip innovation. Strengthening research capabilities is essential for long-term success.
- **Infrastructure Development**: Semiconductor manufacturing requires a highly controlled environment with consistent power supply, water, and other infrastructure, which can be challenging to establish and maintain.
- **Raw Materials**: India must develop or secure access to sources of essential materials like silicon and rare metals.

Way Forward

- **Long-Term Commitment & Upskilling:** Adopt a long-term vision like Taiwan, prioritizing domestic talent development in assembly, testing, packaging, and chip design.
- **Strategic Partnerships:** Partner with established players for technology transfer and incentivize collaboration across the semiconductor value chain.
- **Calibrated Approach:** Acknowledge the strategic importance while resetting timelines and continuously reviewing policies to attract investment and remain competitive.

23. Critical minerals

Why is it in news?

The first-ever auction of critical minerals, offering 20 blocks for sale to Private Sectors by the Indian government marks a significant step towards securing these essential resources.

What are Critical Minerals?

- Critical minerals are minerals essential for the economy, national security, and technological advancements.
- Different countries have their own critical mineral lists based on their needs and vulnerabilities. Recently the Government has released a list of 30 critical minerals for India.
  - Antimony, Cobalt, Copper, Gallium, Germanium, Graphite, Lithium, Nickel, REE, Tantalum, Titanium, Vanadium, etc.

What is their significance?

- **Technological and Industrial Applications**: Critical minerals are crucial components in the manufacture of a wide range of products, including smartphones, electric vehicles, wind turbines, and solar panels.
- **Energy Transition and Renewable Energy**: These minerals are essential for the development and expansion of green energy technologies.
  - Lithium, cobalt, and nickel are crucial for batteries in electric vehicles and RE storage.
- **Economic Security**: Countries that secure access to these resources have a competitive advantage in the global market, particularly in high-tech and emerging industries.
- **Strategic Importance**: Rare earth elements and other critical minerals are used in advanced weaponry and aerospace systems, critical to a country's defense capabilities.
- **Innovation and Technological Advancement**: Research and development in the use of critical minerals can lead to innovations, further driving economic growth and development.

What is the status of critical minerals in India?

- **Limited Reserves:** India has limited known domestic reserves of many critical minerals.
- **Dependency on Imports:** India heavily relies on imports for many critical minerals.
  - 100% import reliance for lithium and nickel, and 93% for copper.
  - For instance, nearly all of India’s requirements for rare earth elements, are met through imports, primarily from countries like China.
- India’s demand for critical minerals is projected to grow significantly due to government initiatives like Make in India, Atmanirbhar Bharat, clean energy transition, and the PLI schemes.

What are the challenges with Critical Minerals in India?

- **Price Fluctuations:** Global market volatility can significantly impact the cost of critical minerals.
- **Supply Chain Disruptions:** Geopolitical tensions or export restrictions can disrupt the supply of critical minerals.
- **Exploration and Extraction Challenges:**
  - Limited geological exploration has hindered the identification of new critical mineral deposits within India.
  - Developing and implementing efficient extraction methods requires significant investment and expertise.
- **Processing and Refining Ecosystem:** India lacks a robust domestic ecosystem for processing and refining imported critical minerals. Dependence on foreign facilities increases vulnerability.
- **Research and Development:** Limited investment in R&D for efficient extraction, processing, and potential substitutes for critical minerals can hinder long-term sustainability.
- **National Security Concerns:** Disruptions in the supply of critical minerals for defense applications can compromise a nation's ability to defend itself.

What are the measures taken by the government towards securing their supply?

The Indian government is taking a multi-pronged approach to secure critical mineral supplies:

- **MMDR Act Amendment 2023:** This amendment identified 24 critical minerals and empowered the central government to auction mineral blocks.
- **Delisting Minerals:** Six minerals, including lithium, have been delisted from the atomic minerals list, allowing private sector participation in their exploration and mining.
- **S&T-PRISM Grants:** The Ministry of Mines provides grants for research and innovation in critical mineral extraction and processing.
- **Khanij Bidesh India Ltd. (KABIL):** aims to acquire critical mineral assets overseas through partnerships with state-owned organizations in resource-rich countries like Argentina and Australia.
- **International Collaboration:**
  - **Mineral Security Partnership (MSP):** India actively participates in the MSP to secure critical mineral resources.
  - **Multilateral Forums:** India is exploring partnerships through Quad, IPEF, and the European Critical Minerals Club to diversify mineral sources.
  - **Technology Acquisition:** India is in discussions with the US, Australia, UK, South Korea, Japan, Brazil, and Argentina for acquiring critical mineral processing technology.
- **New Policy Framework:** The government is formulating a new policy to incentivize exploration, processing, and all stages of critical mineral production within India.

Critical minerals are the lifeblood of modern technologies. By securing their access, India can power its economic engine, bolster its national security, and emerge as a leader in the clean energy revolution.

24. Draft Digital Competition Bill, 2024

Why is it in news?

To curb market dominance by tech companies, India has taken a cue from the European Union and proposed the draft Digital Competition Bill, 2024.

What is the need for the Digital Competition Bill?

- With the digital economy burgeoning, the dominance of big tech companies like Google, Facebook, and Amazon has raised significant concerns regarding anti-competitive practices.
- These corporations have faced accusations of using their market power to stifle competition and innovation. These concerns have prompted global regulatory responses, including the European Union's Digital Markets Act (DMA), which seeks to curb the power of these large corporations and ensure fair competition.
- India has proposed the Digital Competition Bill, 2024, aiming to regulate the digital market more proactively.

What are the Key Provisions of the draft Bill?

- **Predictive Regulatory Framework:** The bill introduces a forward-looking, preventive regulatory approach, aiming to anticipate and mitigate anti-competitive practices before they manifest, rather than addressing them post-occurrence.
- **Designation of Systematically Significant Digital Enterprises (SSDEs):** Specific criteria are set for identifying large tech companies as SSDEs based on their turnover, user base, and market influence. This includes having substantial financial thresholds and user engagement metrics.
  - ₹4,000 crore turnover in India and $30 billion global turnover in the last 3 years or ₹16,000 crore gross merchandise value in India or $75 billion global market capitalization or serves at least 1 crore end users or 10,000 business users.
- **Heavy Penalties for Non-Compliance:** The bill proposes severe financial penalties for violations, which could amount to up to 10% of the global turnover of the offending enterprise.
- **Associate Digital Enterprises (ADEs):** The bill extends regulatory measures to ADEs, which are related entities that benefit from data sharing or other interactions with an SSDE.

How does the draft bill address the Anti-Competitive Practices of Big Tech?

- **Prohibition of Self-Preferencing:** The bill explicitly prohibits Systematically Significant Digital Enterprises (SSDEs) from favoring their own products or services over those of competitors on their platforms.
- **Restrictions on Data Utilization:** The bill limits the ability of SSDEs to use data collected from their platforms to benefit affiliated services unfairly.

  - Google would be restricted from using data from its search engine to give an unfair advantage to its other services, such as Google Maps or YouTube.

- **Anti-Steering Provisions:** The draft legislation prevents SSDEs from steering users towards their own products or services and from penalizing them for choosing alternatives.

  - Apple would not be allowed to restrict iPhone users from downloading apps from third-party stores or to penalize app developers for directing users to purchase subscriptions outside of the App Store.

- **Enhanced Transparency Requirements:** The bill requires digital companies to be more transparent about the algorithms that determine the visibility and ranking of products and services.

- **Regulatory Oversight of Mergers and Acquisitions:** Enhanced scrutiny of mergers and acquisitions involving SSDEs to prevent consolidation that could harm competition.

- **Establishment of Fair Operational Practices:** The bill mandates that SSDEs must ensure fair operational practices, particularly in terms of contract terms with smaller businesses and app developers.

What are the Concerns Associated with the draft Bill?

- **Vague Definitions and Scope:** The bill's definitions of what constitutes anti-competitive behavior are seen as overly broad or vague, leading to uncertainty about how the law would be applied.

  - Terms like 'significant influence' or 'market power' are not adequately defined.

- **Increased Compliance Burdens:** separation of data usage between services, requires substantial operational adjustments and financial investments.

- **Stifling Innovation:** There is a fear that the prescriptive nature of the bill could stifle innovation by restricting how companies operate and innovate within the digital space.

- **Potential for Arbitrary Enforcement:** The discretionary power given to the Competition Commission of India (CCI) to designate entities as SSDEs and ADEs is seen as potentially leading to arbitrary decision-making.

- **Impact on Smaller Businesses:** Small businesses may find it more difficult to leverage the powerful networks of large platforms if those platforms are under heavy regulatory constraints.

- **Global Competitiveness:** Indian tech startups might find it challenging to scale effectively if they are subject to early and rigorous regulatory checks that their international competitors are not.

The Draft Digital Competition Bill, 2024, represents a significant step towards regulating the digital economy in India. Balancing the concerns raised with the need for effective regulation will be crucial for its successful implementation and the healthy growth of India's digital economy.

25. Jan Vishwas (Amendment of Provisions) Bill 2023

Why is it in news?

The Parliament passed the Jan Vishwas (Amendment of Provisions) Bill, 2023. It intends to decriminalise and rationalise minor offences to further "enhance trust- based governance for ease of living and doing business."

What is the Jan Vishwas (Amendment of Provisions) Bill, 2023?

- **Scope of Amendment:** The Bill aims to amend 183 provisions in 42 Central Acts administered by 19 Ministries/Departments, covering various domains such as environment, agriculture, media, industry, trade, information technology, copyright, motor vehicles, cinematography, and food safety.
- **Objective:** The primary objective of the Bill is to decriminalize minor offences that do not harm public interest or national security, replacing criminal penalties with civil penalties or administrative actions.
- **Focuses on non-harmful acts:** Targets offenses that don't cause harm to public interest or national security.
- **Repeal of obsolete acts:** The Bill removes all offences and penalties under the Indian Post Office Act, of 1898, which is considered to be obsolete and irrelevant in the present context.
- **Strengthens implementation:** Includes measures like revising fines, establishing adjudication & appeal processes, and increasing fines periodically.
    - ➢ The Bill provides for a periodic revision of fines and penalties every three years, with an increase of 10%.

What are the Benefits of the Jan Vishwas Bill, 2023?

- **Rationalizing Criminal Provisions:** ensures that citizens, businesses, and government departments can operate without fear of imprisonment for minor, technical, or procedural defaults. This reduces the burden on the legal system and promotes a more conducive environment for compliance.
- **Balanced Punishment:** This ensures that the penal consequence of an offence is commensurate with its seriousness, preventing disproportionate punishment for minor violations.
- **Fostering Trust-based Governance:** by ensuring that citizens, businesses, and government departments can operate without fear of imprisonment for minor, technical, or procedural defaults. This contributes to a more transparent and accountable governance framework.
- **Promotes Compliance:** with laws and regulations by ensuring that penalties are reasonable and do not unduly burden citizens or businesses.
- **Efficient Justice Delivery:** By decriminalizing provisions and introduction of administrative adjudication mechanisms, helps in more reducing case pendency and ensuring timely resolution of cases.
- **Economic Growth:** The enactment of this legislation is expected to be a landmark in rationalizing laws and eliminating barriers, thereby bolstering the growth of businesses.

What are the concerns associated with the Bill?

- **Quasi-Decriminalization:** Critics argue that the Bill represents a form of 'quasi-decriminalization,' suggesting that more comprehensive efforts are needed to fully achieve decriminalization.
- **Technical Expertise of Adjudicating Officers:** Concerns may arise regarding their technical expertise in specific sectors like environment or food safety, potentially leading to inconsistent or inadequate rulings.
- **Transparency and Accountability:** The process for compounding offenses might lack transparency, raising concerns about fairness and potential for corruption.
- **Definition of "Minor Offenses":** A lack of clarity could lead to more serious offenses being decriminalized unintentionally.

The enactment of the Jan Vishwas (Amendment of Provisions) Bill, 2023 is expected to be a landmark in rationalizing laws and eliminating barriers. It sets a guiding principle for future amendments in various laws, leading to consolidated amendments with a common objective. This saves time and cost for both the government and businesses, promoting economic growth and ease of doing business.

26. MSME sector

Why is it in news?

According to Section 43B(h) of the Income Tax Act, introduced through the Finance Act 2023, if a larger company does not pay an MSME within 45 days, it cannot deduct that expense from its taxable income. Several businesses have raised concerns against it to the Finance and MSME ministries, highlighting the trade issues.

What are MSMEs?

- **Definition: MSMEs** are businesses engaged in the production, processing, and preservation of goods and commodities.
- **Classification Criteria:** MSMEs are classified based on their investment in plant and machinery for manufacturing or equipment for service enterprises, as well as their annual turnover.

Type of Enterprise	Investment in 'Plant and Machinery and Equipment'	Turnover
Micro enterprises	Investment < ₹10 million	Turnover < ₹50 million
Small enterprises	Investment < ₹100 million	Turnover < ₹500 million
Medium enterprises	Investment < ₹500 million	Turnover < ₹2,500 million

Source: Notification by the Ministry of MSMEs, GoI, dated 26 June 2020.

- **Micro, Small, and Medium Enterprises Development (MSMED) Act, 2006** addresses various issues affecting MSMEs.

- It establishes a **National Board for MSMEs** to advise on policies and programs, and it empowers the Central Government to enhance the competitiveness of MSMEs.

Significance of MSMEs in India's Growth Trajectory:

- **GDP Contribution and Employment Generation:**
    - **Economic Growth**: MSMEs contribute approximately 30% to India's GDP, underscoring their critical role in the nation's economic expansion.
    - **Employment Opportunities**: These enterprises are labour-intensive, providing employment to over 11 crore people across various sectors. For instance, the textile industry, dominated by small-scale units, employs a significant number of workers.
- **Contribution to Manufacturing Output:** MSMEs significantly bolster the country's manufacturing output, particularly in industries such as food processing, engineering, and chemicals.
    - The share of MSME manufacturing output in all India Manufacturing output during the year 2021-22 was 36.2%.
- **Export Promotion:** MSMEs contribute nearly 45% of India's total exports, enhancing India's presence in the global trade arena with their diverse and often niche product range.
- **Rural Industrialization:** MSMEs aid in balanced regional development by establishing industries in rural and semi-urban areas, thus reducing urban migration and promoting sustainable development.
- MSMEs drive rural industrialization, promoting inclusive economic growth by providing employment and fostering development in rural areas.
- **Fosters Innovation and Entrepreneurship:** with small businesses often being more agile and able to adapt to changing market conditions, introducing new products or services swiftly. India's thriving startup ecosystem, the third largest globally, is largely driven by MSMEs.
- **Economic Diversification and Resilience:** By contributing to various sectors, MSMEs help diversify the economic base, making it more resilient to global economic fluctuations.

What are the Measures taken by the Government Related to MSMEs?

- **Pradhan Mantri MUDRA Yojana (PMMY):** Provides loans up to ₹10 lakh to non-corporate, non-farm small/micro enterprises.
- **Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)**: Mitigates the risk for banks and financial institutions, facilitating easier access to credit for MSMEs.
- **MSME SAMADHAAN:** It allows MSMEs to file cases and track the status of delayed payments online, helping in the settlement of disputes and ensuring timely payments.
- **Government e-Marketplace (GeM):** An online marketplace for public procurement. It provides MSMEs with access to a wider market, enhancing their business opportunities and growth.
- **Prime Minister's Employment Generation Programme (PMEGP)**: Aims to generate employment by setting up new self-employment ventures in rural and urban areas.

- **Credit Linked Capital Subsidy Scheme (CLCSS)**: Facilitates technology upgradation among Micro and Small Enterprises (MSEs) by providing a 15% capital subsidy (up to ₹1 crore).
- **Raising and Accelerating MSME Performance (RAMP)**: It enhances access to markets, credit, and technology for MSMEs.
- **A Scheme for Promotion of Innovation, Rural Industry & Entrepreneurship (ASPIRE)**: Promotes job creation, entrepreneurship, and innovation in the MSME sector by setting up incubation centres and innovation hubs.
- **Micro & Small Enterprises Cluster Development Programme (MSE-CDP)**: Enhances productivity and competitiveness of MSEs through cluster development.
- **Digitalisation Initiatives**: Includes schemes like Digital Saksham and interlinking of Udyam, e-Shram, National Career Service (NCS), and ASEEM portals.
- **CHAMPIONS Portal:** ICT-driven Control Room and Management Information System aimed at enhancing MSME output and strength by providing guidance, support, and assistance to help them become National and Global Champions.

What are the Major Challenges Still Plaguing MSMEs?

- **Lack of Adequate Access to Finance** Despite schemes like Mudra loans, MSMEs struggle to secure credit. Traditional banks view MSMEs as high-risk due to limited credit history and collateral. This restricts their ability to invest in expansion, innovation, and working capital.
- **Delayed Payments**: MSMEs often face delayed payments from larger enterprises or government agencies. Such delays strain working capital and cash flow, disrupting smooth operations.
- **Limited Skilled Workforce**: Skill shortages results in inefficiencies, production delays, reduced product quality and limit the ability of MSMEs to adopt modern practices and innovate.
- **Limited Branding and Outreach:** This makes it difficult to compete with larger companies or established brands.
- **Infrastructure Constraints**: Inadequate infrastructure, such as poor road connectivity and unreliable power supply, hinders MSME operations.
- **Complex Regulatory and Compliance Burdens:** can divert focus from core business activities, affecting overall efficiency.

Way Forward:

- **Push for Digitisation of MSMEs:** Address infrastructure, finance, and knowledge gaps to accelerate digital transformation.
- **Leverage the National Logistics Policy (NLP):** to boost MSME competitiveness by reducing logistics costs from 13-14% of GDP to 8%.
- **Utilize E-commerce Platforms and India Post**: to expand market access for MSMEs, especially in suburban and rural areas, through online e-commerce platforms.
- **Establish MSME Innovation Hubs**: Create physical or virtual hubs to connect MSMEs with industry experts, researchers, and mentors.

27. Pharmacy Sector

Why is it in news?

The government has set a deadline for the mandatory implementation of Good Manufacturing Practices (GMP) in India's pharmaceutical industries to ensure the production of safe, high-quality products and to prevent contamination errors.

What is the significance of the Indian Pharma Sector?

- India ranks 3rd globally for pharmaceutical production by volume and 14th by value.
- The Indian pharmaceutical industry is currently valued at $50 billion and is expected to grow to $65 billion by 2024 and $120 billion by 2030.
- India is the largest provider of generic medicines, accounting for 20% of global supply by volume. It meets a significant portion of generic drug requirements for regions like Africa (50%), the US (40%), and the UK (25%).
- It is the leading vaccine manufacturer, producing 60% of the world's vaccines.
- The country exports pharmaceuticals to over 200 countries, including major markets like the US, UK, and Africa.
- India's pharmaceutical exports were valued at $24.6 billion in 2021-22, demonstrating substantial global demand.

What are the challenges faced by the Pharma Sector?

- **Regulatory Compliance and Quality Control**: Indian companies must comply with stringent regulations of various countries where they export, facing challenges related to quality control, data integrity, and manufacturing practices.
  - Non-compliance can lead to import bans and loss of business opportunities.
- **Intellectual Property Rights (IPR) Issues**: Indian companies have faced legal battles over IPR violations, impacting their ability to innovate and protect their inventions.
  - Cases like Roche vs. Cipla highlight the challenges.
- **Price Control and Profit Margins**: Government-regulated prices of essential medicines limit profit margins, affecting R&D investments.
  - Low profitability hinders innovation and the development of new drugs.
- **Lack of Innovation and Research Focus**: The industry predominantly focuses on generic drug manufacturing, lacking emphasis on research and development.
- **Infrastructure Challenges**: Inadequate infrastructure, including transportation, energy, and communication, hampers the industry's operations.
- **Skilled Workforce Shortage**: The gap between demand and supply of skilled workforce impacts industry growth and innovation.

- **Global Competition and Dependency on China**: The industry faces tough competition from countries like China, which offer lower production costs and higher capacities.
    - Heavy reliance on China for pharmaceutical raw materials, including Active Pharmaceutical Ingredients (APIs), poses a risk to the supply chain and pricing dynamics.

What are the measures taken by the government to promote Pharma Sector?

- **Production Linked Incentive (PLI) Schemes:** to incentivize domestic manufacturing of critical drugs and Active Pharmaceutical Ingredients (APIs). This aims to reduce dependence on imports and strengthen the domestic pharmaceutical industry.
- **Schemes for Promotion of Pharma and Medical Device Parks:** The government establishes dedicated parks with infrastructure and support services to attract investment and create hubs for pharmaceutical and medical device manufacturing.
- **Strengthening of Pharmaceuticals Industry (SPI) Scheme:** This scheme provides financial assistance to existing pharma companies for modernization, capacity expansion, and research & development (R&D) activities.
- **Scheme for Promotion of Research and Innovation in Pharma MedTech Sector (PRIP):** This scheme aims to encourage innovation in the pharmaceutical and medical technology sectors by providing funding for R&D activities.
- **Focus on Regulatory Support:** The government works to streamline regulations and approval processes for new drugs and medical devices to expedite market entry and encourage innovation.
- **Relaxation in Foreign Direct Investment (FDI) norms:** Increased FDI allows for more investment, technology transfer, and potential for collaboration and development of new drugs within the Indian market.
- **Government Sponsored Schemes:** Initiatives like Pradhan Mantri Jan Aushadhi Yojana provide affordable generic medicines to the public, potentially increasing overall demand for pharmaceutical products.

Way Forward

- **Enhance R&D Investments:** India needs to invest more in R&D to move up the value chain and develop innovative new drugs, including biologics and biosimilars.
- **Develop Skilled Workforce:** Bridging the skill gap in the pharma sector is crucial to support growth and innovation. This includes training programs for scientists, researchers, and technicians.
- **Digital Transformation:** Embracing digital technologies like artificial intelligence and data analytics can revolutionize drug discovery, clinical trials, and manufacturing processes.
- **Focus on Quality and Regulatory Compliance:** Strict adherence to international quality standards and strong regulatory compliance will be essential to ensure global acceptance of Indian pharmaceuticals.

INFRASTRUCTURE

28. Railway Safety

Why is it in news?

The issue of Indian railway safety has come under scrutiny following a recent Balasore tragic accident. This incident has raised concerns about the lapses in safety measures within the Indian railway system.

What is the status of Railway Safety in India?

- There has been a significant decline in the number of railway accidents over the past two decades. For example, derailments have dropped from around 350 per year in the early 2000s to 22 in 2021-22.
- Despite the improvements, India still sees a significant number of deaths and injuries, with over 16,000 people killed in 2021.

What are the reasons for poor railway safety?

- **Aging Infrastructure**: Much of India's railway infrastructure is outdated and poorly maintained, struggling to meet modern demands and safety standards.
- **Overcapacity**: Many train routes are overburdened, operating beyond their capacity, which increases the risk of accidents due to congestion.
- **Human Errors**: Accidents often result from human errors, including miscommunication, negligence, and non-compliance with safety procedures.
- **Signalling Failures**: Technical glitches (sudden, usually temporary malfunctioning) and human errors in the signalling system can lead to misrouting of trains and collisions.
- **Level Crossing Risks**: Despite eliminating unmanned level crossings on broad gauge routes, manned level crossings continue to pose significant safety risks.
- **Financial and Corruption Issues**: Inadequate funding and corruption hinder necessary upgrades and maintenance, compromising safety standards.

What are measures taken by the Railways to improve safety?

- **Rashtriya Rail Sanraksha Kosh (RRSK):** Dedicated fund for critical safety upgrades (track, signalling, bridges).
- **Technological Advancements:**
  - **KAVACH:** Indigenous Automatic Train Protection System to prevent signal passing at danger and overspeeding.
  - **LHB Coaches:** Lighter, safer design with better anti-climbing features and fire resistance.
  - **GPS Fog Pass Device:** Aids navigation in low visibility conditions.
  - **Ultrasonic Flaw Detection:** Non-destructive testing to identify and remove faulty rails.

- **Mechanized Track Maintenance:** Reduces human error and improves track quality.
- **Interlocking System:** Centralized control of points and signals for enhanced safety.

- **Elimination of Level Crossings:** Government aims to replace all level crossings on national highways with road over bridges or under bridges under the Setu Bharatam scheme and eliminate all level crossings under by 2024.

What are the measures needed to enhance railway safety?

- **Statutory Railway Safety Authority**: Establish a statutory body with the authority to set safety standards, conduct audits and enforce accountability as suggested by the Kakodkar and Vinod Rai Committees.
- **Financial Investment**: Create a non-lapsable Rashtriya Rail Sanraksha Kosh (RRSK) with an allocation of Rs. 1 lakh crores over five years for safety-related works including track renewal, bridge repair, and signalling upgrades.
- **Advanced Safety Technologies**: Expand the installation of advanced technologies like the Kavach/Train Collision Avoidance System (TCAS), Train Protection Warning System (TPWS), and Automatic Train Control (ATC) across the entire network.
- **Human Resource Development**: Enhance training for railway employees to minimize human errors, focusing on the latest safety procedures and technologies.
- **Independent Accident Investigation**: Establish an independent Railway Accident Investigation Board to conduct impartial inquiries into accidents, ensuring transparency and accountability.
- **Safety Audits and Inspections**: Conduct regular and thorough safety audits and inspections to monitor, evaluate, and enforce safety standards across all operational levels.
- **Confidential Incident Reporting System**: Implement a Confidential Incident Reporting and Analysis System (CIRAS) to encourage reporting of safety violations or concerns anonymously, promoting a proactive safety culture.
- **Management of Culture Transformation**: Shift the management approach from punitive measures to a culture of shared responsibility and safety commitment, focusing on preventive measures and continuous improvement.

While India has made strides in improving railway safety, significant challenges remain. A multi-pronged approach fostering a culture of accountability and continuous improvement is essential to create a truly safe railway system.

29. National Logistics Policy (NLP):

Why is it in news?

The Prime Minister called the launch of the National Logistics Policy a significant step in fulfilling the goal of India being a developed country.

What is the need for NLP?

The logistics sector is the backbone of any economy, ensuring the smooth flow of goods and services both domestically and internationally. Recognizing the challenges and inefficiencies in India's logistics sector, the government introduced the National Logistics Policy (NLP) in 2022.

Logistics refers to a range of activities concerned with physical movement of products – semi-finished or finished – among manufacturers, distributors, retailers and end consumers. These activities involve a lot of people and equipment.

What are challenges with India's Logistics Sector?

- **High Logistics Cost:** Compared to global counterparts (Germany-8%, USA-9%, Europe-10%, Japan-11%), India's logistics cost is significantly higher (14% of GDP). This directly impacts the competitiveness of Indian businesses domestically and internationally.

- **Poor Storage and Handling Infrastructure:** Fragmented warehousing, insufficient cold storage facilities, and the lack of large integrated logistics parks create inefficiencies and increase costs.

- **Imbalance in Modal Mix:** Overdependence on road transport (>60%), which is the most expensive mode, while underutilizing cost-effective options like railways, waterways, and inland water transport.

- **Complex Regulatory Environment:** Diverse taxation structures, numerous regulatory bodies, and intricate policies create delays and hinder the smooth functioning of the logistics sector.

- **Lack of Seamless Connectivity:** The lack of coordinated development between land, sea, and air transport sectors leads to disruptions and hinders smooth movement of goods.

- **Inefficiencies in Port Operations:** Prolonged turnaround time for ships at Indian ports (2.2 days vs global average of 0.97 days) significantly adds to transit delays. Additionally, last-mile delivery challenges further exacerbate the problem.

- **Unorganized Sector:** Over 70% of the sector is unorganized, characterized by a lack of skilled professionals and inadequate training. This leads to inefficiencies and potential safety concerns.

What are the Objectives of NLP?

- **Cost Reduction**: Aim to reduce the logistics cost from the current 13-14% of GDP to around 8% in the next five years.

- **Digital Transformation of the Logistics Sector**: to align with global standards.

  - Integration of data from various departments into a single platform.

- **Unified Logistics Interface Platform (ULIP):** to consolidate all digital services related to transportation.

  - ULIP will enable real-time tracking and digital access to documents.

- **Stakeholder Engagement**: Facilitate industry associations to communicate with the government to address issues.

- **Infrastructure Development**: Strategically establish logistics parks/hubs across the country.

- Setting up multi-modal logistics parks (MMLPs) for faster connectivity.

- **Diversified Transportation**: Reduce dependency on road transport by exploring railways, shipping, and air transport.

- **Regulatory and Institutional Framework**: Create a unified regulatory environment and institutional framework for the logistics sector.

How is NLP expected to streamline India's logistics sector?

- **Boosting Trade**: By easing the movement of goods, NLP aims to enhance both domestic and international trade.

- **Economic Competitiveness**: A reduction in logistics costs will make Indian products more competitive in both domestic and international markets.

- **Infrastructure Synergy**: The policy complements other initiatives like PM GatiShakti, which focuses on multi-modal connectivity.
  - The Bharatmala Project aims to develop a vast highway network across India.

- **Employment Generation**: The logistics sector employs over 22 million people in India, and with NLP, this number is expected to grow.

- **Environmental Consideration**: Emphasis on alternative modes of transport like waterways offers eco-friendly transportation solutions.

- **Global Benchmarking**: The policy aims for India to be among the top 25 countries in the Logistics Performance Index by 2030.
  - As per the World Bank Logistics Index of 2022, India ranks 38th.

- **Technological Advancements**: Adoption of technologies like e-sanchit portal, E-way bills, and FASTag will enhance the efficiency of the logistics sector.

National Logistics Policy is a transformative step towards redefining India's logistics landscape. By addressing the sector's challenges and leveraging its strengths, the NLP is poised to make India a global logistics hub, enhancing trade, boosting the economy and creating employment opportunities

30. Digital Public Infrastructure (DPI)

Why is it news?

India offers valuable lessons on how countries can make use of the digital economy for growth, inclusion, and poverty reduction and the World Bank is sharing the lessons of India's DPI journey with other countries.

What is Digital Public Infrastructure (DPI)?

- These are advanced frameworks developed and managed by governments to foster a comprehensive digital transformation across society.

- These infrastructures integrate various digital services, including digital identity systems, service delivery platforms, and data exchange mechanisms.
- DPIs are designed to be inherently inclusive, characterized by features such as interoperability, openness, low-cost access, and transparency.
- This design not only supports broad societal participation but also promotes economic progress and are instrumental in achieving the SDGs by enabling enhanced service delivery and governance at scale.

What are the Pillars of India's DPI Ecosystem?

- **Digital Identity (Aadhaar):** Aadhaar forms the foundation by providing a unique and verifiable digital identity for citizens.
- **Document Management (DigiLocker):** it complements Aadhaar by providing a secure platform for storing digital copies of important documents (e.g., PAN card, passport, certificates). This eliminates the need for physical documents and simplifies processes.
- **Real-time Payments (UPI):** It facilitates instant and secure digital payments, driving financial inclusion and economic activity.
- Through initiatives like India Stack, India has dramatically expanded its ability to leverage digital technologies across its population.

What is the significance of DPI?

- **Digital Identity:** Systems like Aadhaar have transformed access to services by providing a unique identity that links to various government and financial services.
    - As on 29th September 2023, 138.08 crore Aadhaar numbers were generated.
- **Public Service Delivery:** DPI has enabled the transformation of the government service delivery by building the world's largest direct benefit transfer system that has aided about 615 million people who received USD 322 billion directly into their accounts.
    - Overall savings of more than USD27 billion across key central government services and schemes.
- **Digital Payments:** UPI and Digital Wallets have revolutionized the payment landscape in India, increasing economic activity by making transactions quicker and more transparent, thus promoting financial inclusion.
    - DPIs are poised to propel India towards a $1 trillion digital economy by 2030, helping the country to become a $8 trillion economy, according a NASSCOM report.
- **Economic Impact:** Mature DPIs like Aadhaar, UPI, and FASTag have witnessed widespread adoption, contributing $31.8 billion or 0.9% to India's GDP and are expected to reach even remote areas in the coming years.
    - By 2030, their economic contribution is expected to rise to between 2.9% and 4.2% of GDP.

- **Enhancing Healthcare Delivery:** Telemedicine and Digital Health Records are parts of India's DPI that have made healthcare more accessible and efficient, particularly in remote areas where healthcare services are limited.
  - Ayushman Bharat Digital Mission.
- **Empowering Rural Development:** Agri Stack aims to make it easier for farmers to get easier access to cheaper credit, higher-quality farm inputs, localized and specific advice, and more informed and convenient access to markets and implement various farmer and agriculture-focused benefit schemes.
- **Foundation for Digital Revolution:** Existing DPIs are expected to evolve, leveraging new technologies like AI and Web 3.0 to provide a better user experience. They play an important role in shaping India's future as a tech-driven nation, ultimately driving its growth path towards Viksit Bharat by 2047.

What are the Challenges of DPI in India?

- **Digital Divide:** A substantial digital divide exists between urban and rural India. Urban centres generally have better access to digital infrastructure and services, while rural regions often lag behind. This disparity creates an uneven playing field for DPI adoption.
- **Affordability:** the cost of internet access and digital devices can be a significant barrier for low-income individuals and families. This restricts their participation in the digital ecosystem.
- **Language and Content Barriers:** The lack of localized and relevant content in various languages can prevent many from accessing vital information and services.
- **Privacy and Security Concerns:** Fear of privacy breaches and data security issues can deter people from using DPIs, especially when it involves sharing sensitive personal information.

DPIs have driven significant societal transformation and made substantial contributions to the Indian economy by enhancing inclusivity and accessibility in digital adoption. These infrastructures are pivotal in shaping a connected and inclusive digital future, ensuring that the benefits of digitalisation reach all layers of society.

31. Regional Rapid Transit System (RRTS) Project

Why is it in news?

In order to enhance the connectivity within the NCR, RRTS has been proposed to connect urban, industrial (SEZs/industrial parks), regional and sub-regional centres.

What is it?

- The Rapid Regional Transport System (RRTS) is a revolutionary urban infrastructure project aimed at transforming the transportation landscape in India.
- It is designed to connect metropolitan regions and satellite towns, thereby reducing travel time and enhancing connectivity.

- The National Capital Region Planning Board (NCRPB), has identified eight rapid transit corridors to enhance the efficacy of the transportation system in the NCR.
- RRTS could be a gamechanger for the NCR's dream of becoming a trillion-dollar economy.

What is the significance of RRTS in urban transportation?

- **Enhanced Regional Connectivity**: The RRTS aims to connect major urban centres with peripheral areas, thereby promoting their development and integration with the urban economy.
    - The Delhi-Meerut RRTS corridor will reduce travel time to just 55 minutes, compared to the current 2-3 hours by road.
- **Speed and Efficiency**: the RRTS is significantly faster than the existing metro networks. This will result in quicker commutes and increased efficiency in urban transportation.
- **Integration with Existing Transport Systems**: The RRTS is designed to integrate with other modes of transport like the Delhi Metro, bus terminals, and railway stations, facilitating seamless travel for commuters.
- **Reduced Traffic Congestion**: By providing a fast and efficient alternative to road transport. This will result in smoother traffic flow and reduced travel times.
    - NCR is experiencing the flow of nearly 3.5 lakh passenger cars commuting every day leading to travel delays and congestion.
- **Environmental Impact**: The RRTS, being a public transport system, is expected to reduce the number of private vehicles on the road, leading to lower emissions and a smaller carbon footprint.

What is its impact on Urban Sprawl?

- **Decongestion of Major Cities**: By making commuting from surrounding regions feasible, RRTS will result in accelerating urban sprawl.
    - With the introduction of RRTS, people living in Delhi can consider moving to less crowded areas like Meerut without compromising their career prospects.
- **Balanced Regional Development**: by spreading economic activity more evenly across the region.
    - The RRTS corridor between Delhi and Meerut is expected to boost economic activity in Ghaziabad, Duhai, and Muradnagar.
- **Improved Infrastructure**: The development of RRTS can lead to improvements in infrastructure in areas along the corridor, further contributing to urban sprawl.
- **Social Impact**: Rural and Semi-urban areas will experience changes in lifestyle and community structure associated with urbanization.
- **Environmental Impact**: While RRTS can help reduce the carbon footprint of transportation, the resulting urban sprawl can lead to environmental challenges such as loss of agricultural land and natural habitats.

How does it promote growth of Satellite Towns?

- **Population Redistribution**: The improved connectivity provided by RRTS can lead to a redistribution of population from major cities to satellite towns.
- **Improved Quality of Life:** residents of satellite towns can enjoy the amenities of the city while living in a less crowded and more affordable environment.
- **Boost to Real Estate**: in satellite towns by attracting more residents and investors.
  - Property rates in areas along the RRTS corridor have increased by 35-40% in the last two years.
- **Stimulate Economic Development**: Improved Infrastructure makes them more attractive to residents and businesses.
- **Improved Social Infrastructure:** including schools, hospitals, and recreational facilities.

The Rapid Regional Transport System (RRTS) has the potential to significantly transform the urban transportation landscape in India. This can help decongest major cities and promote the growth of satellite towns. However, it is important to ensure that the development of RRTS is accompanied by appropriate urban planning measures to manage the resulting urban sprawl and ensure balanced regional development.

32. Maritime Amrit Kaal Vision 2047

Why is it in news?

The Prime Minister unveiled 'Amrit Kaal Vision 2047', a blueprint for the Indian maritime blue economy during the third edition of Global Maritime India Summit, 2023.

What is the Maritime Amrit Kaal Vision 2047?

- Launched in 2023, the Maritime Amrit Kaal Vision 2047 (MAKV 2047) is a plan by the Indian government to establish the country as a global leader in the maritime sector by the year 2047.
- It builds upon the earlier Maritime India Vision 2030.
- It's part of the broader vision for India's future during the next 25 years of independence, known as the Amrit Kaal.

What are its objectives?

- **Comprehensive Development**: The vision seeks to develop world-class ports and enhance the infrastructure of inland water transport, coastal shipping, and other maritime activities.
- **Promote Inland Water Transport & Coastal Shipping:** It seeks to make better use of India's inland waterways and coastal shipping routes. This would reduce dependence on land-based transportation and improve overall logistics efficiency.
- **Become a Leader in the Blue Economy:** The vision emphasizes sustainable development of ocean resources. This includes promoting activities like fishing, aquaculture, and marine

renewable energy, while also protecting the marine environment.

- **Enhance Maritime Security:** Establishing a Bureau of Port Security and promoting overall maritime safety and security are crucial objectives.

- **Increase Job Creation:** The development of the maritime sector is expected to generate significant employment opportunities in various sectors like shipbuilding, shipping, and port operations.

What are the strategies envisioned to translate the vision into reality?

- **Infrastructure Enhancement**: The vision includes major investments in port facilities. Six port clusters identified for development as Mega Ports by 2047.

  - Two port clusters with Capacity Exceeding 500 MTPA: (i) Deendayal and Tuna Tekra and (ii) Jawaharlal Nehru – Vadhavan

  - Four port clusters with a capacity exceeding 300 Million Tonnes Per Annum (MTPA): Cochin –Vizhinjam Port cluster, Galathea South Bay Port, Chennai – Kamarajar– Cuddalore Port cluster, Paradip and Other Non-Major Ports Cluster.

- **Public-Private Partnerships (PPPs)**: to leverage private sector efficiencies and expertise in building state-of-the-art maritime infrastructure.

- **Promoting Sustainability Initiatives**: across all maritime activities, aligning with global environmental standards to reduce carbon emissions and other ecological impacts.

- **International Collaboration**: and aligning with global economic corridors like the India-Middle East-Europe Economic Corridor (IMEEC) to enhance trade connectivity and economic integration.

- **Technological Advancements**: Incorporating advanced technologies in maritime operations, including shipbuilding, navigation, and logistics to improve efficiency and competitiveness.

- **Maritime Tourism**: Developing infrastructure to transform India into a global cruise hub with state-of-the-art cruise terminals in Mumbai, Visakhapatnam, and Chennai, and promoting maritime heritage sites like Lothal.

- **Comprehensive Policy Framework**: Updating and refining maritime laws and regulations to support the development goals and ensure a coherent policy environment that facilitates growth and innovation.

- **Actionable Initiatives**: Outlines over 300 actionable initiatives aimed at boosting efficiency, increasing investment, and enhancing the overall competitiveness of the ports, shipping, and waterways sectors.

The MAKV 2047 holds the potential to propel India into a global maritime powerhouse by 2047. If successful, this vision could create a robust logistics network, generate significant job opportunities, and solidify India's position as a leader in the blue economy.

33. National Electricity Plan (NEP)

Why is it news?

The Central Electricity Authority (CEA) has notified the National Electricity Plan (NEP) for the period of 2022-32. It includes the review of the last five years (2017-22), a detailed plan for the next five years (2022-27) and the prospective plan for the next five years (2027-32).

What is National Electricity Plan (NEP)?

- The National Electricity Plan (NEP) is a strategic and foundational document for India's power sector, drafted every five years by the Central Electricity Authority (CEA) under the Electricity Act, 2003.
- It serves as a comprehensive blueprint for the development of the power sector, guiding strategic investments, policy-making, and the overall direction of energy development in India.

What are the objectives of the plan?

- **Demand Assessment**: The NEP evaluates the current and future demand for electricity across the country, ensuring that the power sector can adequately meet these needs.
- **Capacity Planning**: It outlines the necessary capacity additions, both in terms of generation and transmission, required over the next five years and provides a longer-term projection for the subsequent 15 years.
- **Resource Optimization**: The plan aims to optimize the use of various energy resources to ensure efficient, sustainable, and cost-effective electricity supply. This includes the integration of renewable energy sources to meet India's environmental commitments.
- **Sector Coordination**: The NEP coordinates the activities of various stakeholders and planning agencies involved in the power sector, facilitating a more integrated and streamlined approach to power system development.
- **Review and Update**: It includes a review of the achievements and shortfalls of the previous five years, allowing for adjustments and strategic redirection in response to changing technological, economic, and environmental conditions.

What are the key features of NEP?

- **Demand and Supply Projections**: As per NEP, all India peak electricity demand and electrical energy requirement is 277.2 GW and 1907.8 BU for the year 2026-27 and 366.4 GW and 2473.8 BU for the year 2031-32.
- **Capacity Expansion**: The NEP anticipates a total installed capacity of 609.5 GW by 2026-27 and 900.4 GW by 2031-32, with a substantial portion coming from renewable sources such as solar, wind, and large hydro.
- **Renewable Energy Focus**: The plan emphasizes a shift towards non-fossil fuel sources, aiming to increase the share of non-fossil based capacity to 57.4% by 2026-27 and 68.4% by 2031-32, aligning with the target to achieve 500 GW of non-fossil installed capacity by 2029-30.

- **Coal Dependency**: While focusing on renewables, the NEP also acknowledges the ongoing need for coal-based power, estimating the coal requirement to be significant in the coming years, even as it plans for new coal-based capacity additions.

- **Challenges of Renewable Integration**: The NEP discusses the operational challenges posed by a high renewable energy mix, including the need for enhanced grid management and reliable backup systems to maintain supply stability.

  - It projects an increased need for both Pump Storage Plants (PSP) and Battery Energy Storage Systems (BESS).

- **Technological Advancements**: It highlights the need for advanced technologies in battery storage and other areas to support the integration of high levels of renewable energy into the grid.

- **Emission Reductions**: The average emission factor is expected to reduce to 0.548 kg $CO2/kWh_{net}$ in the year 2026-27 and to 0.430 kg $CO2/kWh_{net}$ by the end of 2031-32, reducing the carbon intensity of electricity generation.

What are the challenges that can hamper the implementation of NEP?

- **Financial Constraints**: Securing adequate funding for the massive infrastructure required for capacity expansion, especially in renewable energy and modern grid systems, is a significant challenge.

- **Regulatory Hurdles**: Delays and inconsistencies in regulatory approvals can slow down the implementation of planned projects and discourage investment.

- **Technological Limitations**: The integration of a high percentage of renewable energy sources into the grid poses technical challenges in terms of storage, stability, and reliability.

- **Supply Chain Disruptions**: Dependency on foreign technology and equipment, especially for renewable energy technologies, can lead to delays if there are global supply chain disruptions.

- **Environmental Concerns**: Environmental regulations and the need for sustainable development can restrict the pace and scope of infrastructure development, especially in ecologically sensitive areas.

- **Coordination Among States**: Differing priorities and capabilities of state governments can affect the uniform implementation of the NEP across all regions.

- **Cybersecurity Risks**: With increased digitization of the grid, cybersecurity becomes a critical concern that needs robust management to prevent disruptions.

The National Electricity Plan (NEP) aims to meet India's broad electricity needs by expanding capacity with a focus on renewable sources, improving grid reliability, and promoting sustainable development to ensure a stable and future-proof energy supply.

34. National Gas Grid

Why is it in news?

The Petroleum and Natural Gas Regulatory Board (PNGRB) has implemented Unified Tariff with effect from 01.04.2023 for the interconnected natural gas pipelines with an objective of "One Nation, One Grid and One Tariff".

What is the need for a National Gas Grid?

- **Energy Security**: Enhances energy security by diversifying supply sources across the country, reducing dependence on any single source.
- **Energy Market Integration**: Integrates 5 regional energy markets, leading to more efficient national energy distribution, accessibility and pricing.
- **Support Energy Policy Goals**: It supports India's ambitious target to increase the share of natural gas in its energy mix to 15% by 2030, up from the current 6.2-6.5%, aligning with global averages.
- **Reduce Import Dependency**: By improving domestic gas distribution infrastructure, the grid will help reduce India's dependency on imported natural gas, which currently stands at 53%.
- **Economic Development**: A unified gas grid will facilitate the smoother transmission of energy, promoting industrial growth and helping transition towards a gas-based economy.
- **Environmental Benefits**: Natural gas is a cleaner alternative compared to other fossil fuels. Expanding its availability and usage supports India's commitments to reducing carbon emissions and promoting sustainable energy practices.

What are the measures taken towards establishing a National Gas Grid?

- **Expansion of Pipeline Network**: The PNGRB has authorised a network that will eventually stretch approximately 33,622 km, with 24,623 km already operational.
- **Construction of New Pipelines**: An additional 10,860 km of pipeline is currently under construction. This expansion is crucial for connecting underserved areas and integrating regional networks into a cohesive national grid.
- **Unified Tariff Implementation**: This initiative, under the "One Nation, One Grid and One Tariff" framework, aims to simplify the tariff structure across the country, ensuring a consistent pricing model for all users.
- **Increased Tariff Zones**: To further streamline tariff implementation and protect consumer interests across different regions, the number of unified tariff zones has been increased from two to three.

What are the challenges associated in its operationalization?

- **Geographical and Technical Barriers**: Constructing and maintaining pipelines across diverse and challenging terrains, including urban areas and environmentally sensitive zones.
- **Financial Constraints**: High costs of pipeline construction and operation necessitate substantial and sustained investment.

- **Regulatory Delays**: Difficulties in securing land and complex regulatory frameworks and lengthy approval processes can impede timely project execution.
- **Market Development**: Establishing a consistent demand for natural gas in newly connected regions and integrating it into the local energy mix.
- **Integration with Renewables**: Coordinating natural gas usage with increasing renewable energy sources poses technical and regulatory challenges.
- **Import Dependency**: High reliance on imported natural gas makes the grid vulnerable to global market fluctuations.

India needs robust infrastructure, regulatory reforms, market diversification, technological innovation, and strong public-private partnerships, to transition to a gas-based economy, providing a cleaner, more efficient, and sustainable energy future.

35. Mines & Minerals (Development & Regulation) Amendment Bill 2023

Why is it in news?

Recently, the Parliament passed the Mines and Minerals (Development and Regulation) Amendment Bill, 2023, in a bid to attract private sector investment in the exploration of critical and deep-seated minerals in the country.

What is the status of mineral exploration and mining in India?

- **Geological Potential**: India's geological and tectonic setting is conducive to a range of mineral resources, akin to regions like Western Australia and Eastern Africa, which are known for their rich mineral deposits.
  - It is estimated that India has explored just 10% of its Obvious Geological Potential (OGP), less than 2% of which is mined.
- **Critical Minerals List**: The Indian Ministry of Mines has identified 30 minerals critical to the country's economic development and national security, highlighting the strategic importance of these minerals in India's policy framework.
- **High Dependency on Imports**: India relies entirely on imports for essential minerals like lithium, cobalt, and nickel, primarily from countries such as China, Russia, Australia, South Africa, and the USA.
  - In 2021-2022, India's imports included lithium-ion batteries worth $1.79 billion and copper worth over Rs. 27,000 crores in 2022-2023.
- **Economic and Strategic Vulnerabilities**: The dependence on imports for critical minerals exposes India to economic vulnerabilities and strategic risks, particularly in the context of global supply chain uncertainties and geopolitical tensions.
- **Limited Domestic Production**: While India holds 6% of the world's reserves of Rare Earth Elements (REEs), it produces only 1% of the global output. This underutilization of domestic resources underscores the need for enhanced exploration and mining capabilities.

What are the challenges with the current regime?

- **Inadequate Funding**: India allocates less than 1% of the global mineral exploration budget, restricting the extent and effectiveness of exploration activities.
- **Public Sector Dominance**: Exploration is predominantly carried out by government agencies like the Geological Survey of India and Mineral Exploration Corporation Limited, with minimal private sector involvement due to lack of supportive policies and incentives.
- **Regulatory Challenges**: Despite the amendments, the current regime is not conducive to attracting private investment, lacking robust incentives and clear guidelines for private participants.
- **High Risk and Investment**: Mineral exploration is a high-risk, capital-intensive process with a success rate of less than 1% for turning exploration projects into viable mines, deterring substantial investments.
- **Governance Issues**: Past concerns over favouritism and resource allocation misuse, highlighted by the Supreme Court in 2012, have underscored the need for more transparent and equitable processes in mining resource distribution.
- **PSU Performance**: Public Sector Undertakings have underperformed in mining critical and deep-seated minerals, indicating a gap in technical expertise and efficient management within the sector.

How is the amendment expected to address these issues?

- **Reclassification of Minerals**: Shifts six critical minerals from government-exclusive mining to being accessible for commercial exploration by private entities, broadening the scope for mineral development.
- **Permitting Advanced Exploration**: Allows previously prohibited actions like drilling and excavation during reconnaissance, facilitating more thorough and effective exploration activities.
- **New Exploration Licence**: Introduces a new Exploration Licence (EL) to encourage private sector involvement in early-stage exploration, valid for five years and extendable by two.
- **Competitive Bidding**: Adopts a competitive bidding process for issuing exploration licenses, promoting transparency and fairness in the allocation of mining rights.
- **Focused Mineral List**: Licenses will specifically cover 29 critical, strategic, and deep-seated minerals, targeting exploration efforts towards minerals essential for national development.
- **Defined Exploration Area**: Specifies that exploration activities can be conducted in areas up to 1,000 sq km under a single licence, ensuring efficient and sustainable exploration practices.

What are the concerns associated with the amendment?

- **Bureaucratic Delays**: Lengthy government timelines for clearances can extend the exploration process by years, potentially deterring investment.
- **Financial Uncertainty**: Explorers face unpredictability in earnings as auction premiums, determining their revenue, are only revealed post-successful auction of a mine.

- **Government Control**: Only the government can auction discovered minerals, limiting explorers to a share of the auction premium at an unspecified time, reducing immediate financial benefits.

- **International Non-Competitiveness**: Unlike in some global jurisdictions where explorers can sell discoveries directly, the amendment restricts this, potentially making India less attractive for international investors.

- **Investment Risks**: The amendment does not assure explorers of utilizing discovered resources, discouraging substantial capital investment due to high risk without guaranteed returns.

While the recent amendment is a step in the right direction towards modernizing the mining sector and enhancing its global competitiveness, it requires a balanced approach that encourages investment while safeguarding national interests and environmental standards.

36. Coal Logistics Plan and Policy

Why is it in news?

Union Minister of Coal Shri Pralhad Joshi has recently launched a groundbreaking initiative, the "Coal Logistics Plan and Policy."

What are the objectives of the coal Logistics Plan and Policy?

- **Boost Coal Production**: The primary objective is to increase India's coal production to 1.5 billion tonnes by FY 2030, reducing dependence on imported coal and ensuring energy self-reliance as part of the Aatmanirbhar Bharat initiative.

- **Integrated Transportation Network**: Develop a technologically advanced and integrated transportation network that includes rail, road, waterways, and coastal shipping, aimed at efficient and cost-effective coal evacuation.

- **Enhance Evacuation Capacities**: Implement first-mile connectivity projects and expand rail and waterway capacities to support the increased volume of coal production and ensure resilient transportation infrastructure.

- **Promote Sustainability**: Focus on sustainable logistics practices that minimize environmental impact, incorporating cleaner technologies and improving the overall environmental footprint of coal transportation.

- **Strengthen Supply Chain Reliability**: Enhance the reliability and efficiency of the coal supply chain through technological innovations and a trusted logistics ecosystem, ensuring steady coal supply to meet the demands of various industries and power plants.

What is the need for the coal logistics plan and policy?

- **Ensuring Energy Security**: During peak demand periods, especially in the summer months, power plants in India face significant coal shortages, leading to potential energy supply disruptions.
    - A dedicated coal logistics policy is essential to ensure a steady and reliable supply of coal, thereby maintaining energy security and stability across the nation.

- **Mitigating Supply Chain Disruptions**: The transportation of coal has historically faced numerous challenges, including logistical inefficiencies and infrastructure constraints.
  - A structured logistics plan can address these vulnerabilities through improved infrastructure and better management practices, ensuring a smoother supply chain.

How is the plan expected to address issues with thermal power sector?

- **Cost Reductions**: Implements a railway-based system for First Mile Connectivity, leading to a 14% cut in rail logistic costs and annual savings of Rs 21,000 Crore, directly decreasing the operational costs for thermal power plants.
- **Efficiency Improvements**: Aims for a 10% reduction in the average turnaround time of wagons, enhancing the responsiveness and reliability of coal supply to power plants.
- **Environmental Advantages**: Anticipates a reduction in carbon emissions by about 100,000 tonnes per annum and decreases air pollution and traffic congestion through more efficient coal transport systems.
- **Streamlined Handling**: Focuses on optimizing storage, loading, and unloading processes to minimize delays, maintain coal quality, and reduce wastage.
- **Economic Viability**: By improving logistical efficiency and reducing costs, the policy supports the economic sustainability of the thermal power sector, contributing to lower electricity prices for consumers.

Overall, the Coal Logistics Plan and Policy is structured to bolster the thermal power sector by making coal supply chains more robust, environmentally friendly, and economically feasible. These improvements are crucial for the sustainability and reliability of thermal power as a key component of India's energy mix.

37. UDAN Scheme

Why is it in news?

The Ministry of Civil Aviation has launched the 5th round of the Regional Connectivity Scheme (RCS) – Ude Desh Ka Aam Nagrik (UDAN) to further enhance connectivity to the country's remote and regional areas and achieve last mile connectivity.

What are the objectives of the Scheme?

The UDAN (Ude Desh ka Aam Nagrik) Scheme, a part of the Regional Connectivity Scheme (RCS), aims to revolutionize regional air travel in India.

- **Enhanced Regional Connectivity:** UDAN seeks to bridge the gap by connecting unserved and underserved airports, promoting air travel access in remote areas.
- **Balanced Regional Growth:** The scheme aims to foster balanced development across regions by prioritizing air connectivity beyond major hubs.
- **Affordability for the Masses:** UDAN aims to make air travel more accessible by encouraging airlines to offer competitive fares on regional routes.

Strategies to Achieve Objectives:

- **Financial Incentives:** The scheme provides Viability Gap Funding (VGF) for 3 years to airlines operating on designated routes, making these operations financially viable.
- **Concessions from Stakeholders:** Central and state governments, along with airport operators, offer concessions like reduced landing charges, taxes, etc. to incentivize airlines to operate in these regions.
- **Market-Driven Approach:** UDAN is a market-driven scheme where airlines submit proposals based on their assessment of demand, promoting competition and efficiency.
- **Balanced Route Allocation:** Routes are allocated across five regions (North, South, East, West, and North-East) to ensure equitable distribution of benefits.
- **Regional Connectivity Fund (RCF):** A levy on departures from larger aircraft helps fund the scheme's overall sustainability.

What are the features of the previous phases of the UDAN Scheme?

- **UDAN 1.0:** 5 airlines companies were awarded 128 flight routes to 70 airports (including 36 newly made operational airports)
- **UDAN 2.0:** 73 underserved and unserved airports were announced and for the first time, helipads were also connected.
- **UDAN 3.0:** In coordination with the Ministry of Tourism, Tourism Routes were included. In addition to Seaplanes for connecting Water Aerodromes, several routes in the North-East Region came under the ambit of the scheme.
- **UDAN 4.0:** Gave impetus to North-Eastern Regions, Hilly States, and Islands. The operation of helicopters and seaplanes incorporated.

What are the Key Features of the UDAN Scheme 5.0?

- **Focus on Category-2 and Category-3:** UDAN 5.0 prioritizes larger aircraft (20-80 seats and >80 seats) compared to previous phases, potentially leading to increased passenger capacity on regional routes.
- **Greater Operational Flexibility:**
    - **Distance Cap Removed:** The earlier 600 km stage length cap has been waived off, allowing airlines to operate flights on any distance, potentially connecting far-flung regions.
    - **No Predetermined Routes:** Airlines can now propose their own network and individual route proposals, fostering a more demand-driven approach.
- **Enhanced Efficiency and Transparency:**
    - **Action/Business Plan:** Airlines must submit a detailed plan after receiving the Letter of Award, ensuring better preparedness for operations.

- **Anti-Monopoly Measures:** The same route cannot be awarded to a single airline multiple times, and exclusivity is withdrawn for routes with consistently high Passenger Load Factor (PLF), promoting competition and preventing dominance.

- **Faster Operationalization:**
  - **Performance Incentives:** Airlines face penalties for delays in starting operations, incentivizing faster route commencement.
  - **Shorter Deadline:** The deadline for starting operations after route award has been reduced from 6 months to 4 months, expediting regional connectivity.
  - **Simplified Route Transfer:** The process for transferring routes between operators is simplified and incentivized through fiscal support, promoting network optimization.

What are the achievements under UDAN Scheme so far?

- **Network Expansion and Infrastructure Development:** UDAN has led to the development and operationalization of 76 airports, including water aerodromes and helipads, in various regions. This expands accessibility and caters to diverse geographical needs.
- **Enhanced Connectivity:** Over 519 routes have been operationalized, including dedicated tourism routes and helicopter services for hilly regions, significantly improving regional travel options.
- **Passenger Growth:** More than 1.33 crore passengers have benefited from UDAN flights, demonstrating a rise in regional air travel demand.
- **Aircraft Diversification:** UDAN has encouraged airlines to procure various aircraft types, ranging from small 3-seater planes to larger 189-seater jets, catering to diverse route requirements and passenger capacities.
- **Airline Growth:** The scheme has fostered the birth of new airlines like Air Taxi, IndiaOne, Star Air, FlyBig, and Fly91, promoting competition and market dynamism.
- **Regional Growth Catalyst:** UDAN has become a game-changer for many airports by triggering air connectivity, paving the way for regional economic development.

What are the challenges that need to be addressed?

- **Commercial Viability:**
  - **Low Demand Routes:** Many routes identified under UDAN lack sufficient passenger demand, making them commercially unviable for airlines even with subsidies.
  - **High Route Cessation Rate:** Even with subsidies, the high number of discontinued routes (225) indicates the difficulty of sustaining operations on some routes and ineffectiveness of the current subsidy structure.
- **Infrastructure Constraints:** Limited infrastructure in remote regions poses challenges for safe and efficient operations. Upgrades and improvements are necessary to accommodate increased air traffic.

- **High Operating Costs:** Airlines operating in remote areas face higher fuel, maintenance, and logistical costs, further impacting their profitability.

- **Airfare Caps and Revenue:** Caps on airfares for UDAN flights can restrict airline revenue, especially when operational costs are high, potentially discouraging participation on certain routes.

- **Limited Public Knowledge:** Many potential passengers remain unaware of UDAN services, hindering demand and overall utilization of regional air connectivity.

The UDAN Scheme has taken significant strides in bridging the air connectivity gap in India. By addressing the challenges, UDAN can truly democratize air travel and unlock India's regional potential.

38. Functioning of Major ports in India

Why is it in news?

The Parliamentary Standing Committee on Transport, Tourism and Culture has recently submitted a report on the 'Functioning of major ports in the Country.'

Major Ports of India:

- India has 12 major ports: six on the east coast and six on the west coast.

- Notable ports include Kolkata (oldest, riverine), Mumbai (largest natural), and Ennore (only corporatized). These ports, along with others like Jawaharlal Nehru Port (Navi Mumbai) and Deendayal Port (Kandla), form a strategic network supporting India's maritime trade.

- Major ports handle 55% of India's total port traffic, while minor ports manage the remaining 45%. The total traffic handled by the Major Ports in 2022-23 was 796 MT, an increase of 10.41% over the preceding year of 720 MT.

- The Major Ports had reversed the trend of their declining market share.

- The capacity of Major Ports has increased over the years. However, the capacity utilisation was only around 49% of about 1,600 million tonnes.

What are the Challenges faced by Major Ports in India?

- **Competition from Non-Major Ports:** Non-major ports offer greater operational efficiency, more flexibility in setting tariffs, and often have newer infrastructure. This makes them more attractive to businesses, leading to cargo traffic shifting away from major ports.

- **Outdated Infrastructure:** Many major ports suffer from old and inadequate infrastructure, and shallow draft depths resulting in limited cargo handling capacity, higher turnaround and cargo dwell times, increasing overall logistics costs.

- **Poor Hinterland Connectivity:** Inefficient road, rail, and inland waterway connections between major ports and industrial centers can lead to delays and increase transportation costs.

- **Lack of Technological Advancements:** in port operations, such as automation, digitalisation, and use of data analytics, due to high initial investment costs and the need for skilled manpower.

- **Lack of Transhipment Hubs:** Indian ports handle only 25% of transhipment cargo, with the rest going to international hubs like Colombo and Singapore, leading to revenue loss and increased costs for Indian traders.

- **Environmental Concerns:** Development of mega ports faces challenges such as land acquisition, financing, and environmental regulations, which need to be addressed for sustainable growth.

What are the measures taken to improve the Functioning of Major Ports?

- **Increasing Draft:** Ports are striving to achieve deeper drafts of up to 18 meters to accommodate larger vessels and improve cargo handling capacity.

- **Infrastructure Development:** The government has prioritized the development of port infrastructure, including deep draft channels, modern berths, and storage facilities, to enhance port capacity and efficiency.

- **Connectivity Enhancement:** Efforts are being made to improve rail and road connectivity to major and non-major ports through projects like the Sagarmala Programme and the PM Gati Shakti, which aim to reduce logistics costs and enhance port trade competitiveness.

- **Digitalization:** Ports are adopting digital initiatives such as the Port Operating System (POS), Terminal Operating System (TOS), and National Logistics Portal (NLP) to improve operational efficiency, reduce costs, and enhance transparency.

- **Privatization and PPPs:** Ports are inviting private sector investments to install and operate modern equipment, and some ports are adopting the PPP model for mechanization and modernization projects.

What are the Recommendations of the Committee?

- **Complete Mechanization:** The committee recommends completing the mechanization of all berths in major ports by 2030 to improve productivity and efficiency.

- **Develop Mega Ports:** The committee suggests developing mega ports with better infrastructure, higher capacity, and enhanced connectivity to handle ultra-large ships and increase trade volumes.

- **Focus on Transhipment:** India should aim to handle 75% of transhipment volumes at its ports to reduce costs and increase revenue streams.

- **Enhanced Connectivity:** Proper planning and involvement of agencies like NHAI and Ministry of Railways are essential to ensure seamless connectivity for port projects, which should be implemented in a time-bound manner.

- **Green Shipping Initiatives:** Ports should focus on increasing the share of renewable energy, reducing carbon emissions, and implementing eco-friendly practices to mitigate environmental impact.

SERVICE SECTOR

39. Open Network for Digital Commerce (ONDC)

Why is it in news?

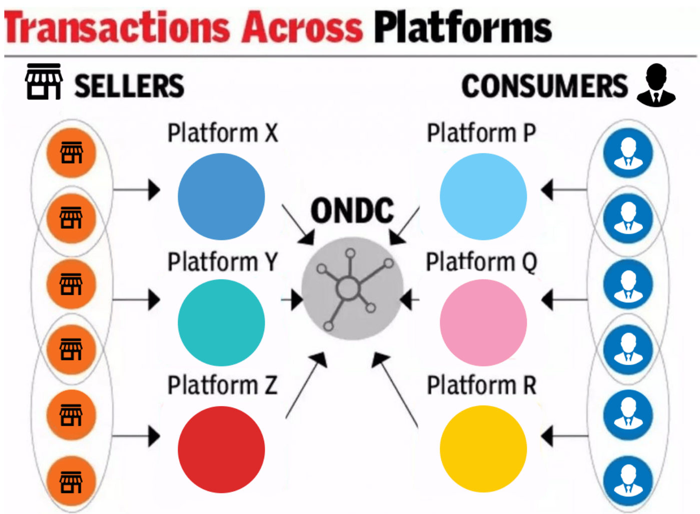
- Recently, the Indian government directed e-commerce and food delivery companies to join the government-supported Open Network for Digital Commerce (ONDC).
- While companies like Flipkart and Zomato are creating subsidiaries to integrate with this network, others such as Amazon and Swiggy have yet to participate.

What is Open Network for Digital Commerce?

The Open Network for Digital Commerce (ONDC) is a revolutionary initiative aimed at transforming India's e-commerce landscape.

- **Open Network Philosophy:** This means it's not a single platform or app, but rather a set of protocols and standards that enable various platforms and applications to connect seamlessly.
- **Open Source Foundation:** ONDC utilizes freely available specifications and protocols, this fosters transparency, encourages innovation, and prevents any single entity from controlling the network.
- **Countering Market Dominance:** ONDC was developed to address concerns about the dominance of a few large e-commerce platforms. It aims to create a level playing field, empowering smaller sellers and fostering competition.
- **Government Backing:** A private non-profit company, ONDC, is backed by DPIIT under the Ministry of Commerce and Industry. This signifies government support for creating a more inclusive e-commerce ecosystem.
- **Collaboration, not Competition:** ONDC is not designed to replace existing platforms. Instead, it facilitates collaboration by allowing established players and new entrants to integrate into the network.

How will ONDC function?



What are the benefits associated with ONDC?

- **Promoting Technological Self-Reliance:** ONDC's open-source foundation reduces dependence on foreign technology giants, fostering domestic innovation in e-commerce solutions.
- **Reduced Entry Barriers:** ONDC lowers the barrier for sellers to enter the online market. This can empower small businesses and individual sellers to reach a wider customer base.
- **Capturing the Domestic Retail Market:** ONDC paves the way to tap into the vast potential of the Indian domestic retail market (US$810 billion), benefiting both sellers and buyers.
- **Benefits for Sellers:**
  - **Wider Customer Reach:** ONDC connects sellers to a larger pool of potential buyers across various platforms.
  - **Enhanced Product Visibility:** Sellers gain greater discoverability for their products, potentially leading to increased sales.
  - **Greater Autonomy:** Sellers have more choices when it comes to online visibility, allowing them to negotiate better terms.
  - **Reduced Costs:** ONDC can potentially lower operational costs for sellers by eliminating dependence on single platforms.
  - **Improved Value Chain:** Sellers have access to a wider range of value-added services like logistics and fulfillment.
- **Benefits for Buyers:**
  - **Wider Choice:** ONDC offers buyers access to a broader selection of sellers and products, increasing their options.
  - **Improved Service:** Integration with hyper-local retailers could lead to faster deliveries and better services.
  - **Enhanced Customer Experience:** ONDC aims to create a more seamless and efficient shopping experience for buyers.
- **Benefits for Technology Platforms:**
  - **Opportunities for Startups:** ONDC provides a platform for innovative startups to develop solutions and drive growth within the network.
  - **Market Growth:** Platforms can benefit from the overall growth of digital commerce facilitated by ONDC.
  - **Faster Growth:** ONDC can potentially reduce time-to-market and time-to-scale for new platforms.
  - **Focus on Specialization:** Platforms can specialize in specific areas, leaving other aspects to other network participants.

What are the challenges faced by ONDC?

- **Reaching Small Businesses:** Many small business owners lack the technical expertise and awareness to navigate the ONDC platform. Massive outreach programs and simplified onboarding procedures are crucial.

- **Information Overload for Customers:** Customers might face difficulty navigating through a vast network of sellers and products. Strategies to ensure user-friendly interfaces and product categorization are essential.

- **Longer Transaction Loops:** Unlike UPI's closed loop transactions, ONDC involves offline deliveries and potentially complex return and grievance redressal mechanisms. Building robust logistics and customer service frameworks will be critical.

- **Reluctance of Major Players:** The current reluctance of major e-commerce players to join ONDC raises questions about its effectiveness in challenging their dominance. Strategies to incentivize participation or address their concerns need to be explored.

- **Mixed Messaging:** The government's initial focus on protecting small retailers from big players, followed by an invitation to all players, has created confusion about ONDC's core strategy. A clear roadmap that balances competition with inclusivity is required.

ONDC is a bold initiative with the potential to be a disruptive force in Indian e-commerce. However, the ONDC's long-term success depends on effective implementation strategies, addressing stakeholder concerns, and fostering a truly inclusive and competitive online marketplace.

40. Insurance Sector

Why is it in news?

Bima Sugam, part of IRDAI's Bima Trinity - Bima Vistaar, Bima Vahak, and Bima Sugam - is a platform that will list insurance products from life, health, general, motor, travel, property, among other insurance categories, providing a comprehensive one-stop shop for insurance needs.

What is the status of Insurance Sector in India?

- India is the fifth-largest life insurance market among emerging economies, growing at 32-34% annually.

- Forecasted total insurance premium growth is 7.1% in real terms from 2024-28, making India the fastest-growing insurance sector among G20 countries.

- The sector has attracted substantial foreign direct investment, totaling nearly US$ 6.5 billion (Rs. 54,000 crore) over the past nine years.

- Life and non-life insurance segments show promising growth trajectories. The sector is becoming more competitive and innovative, with increasing foreign investments and evolving distribution channels.

- The Indian insurance market is set for robust growth, driven by economic growth, an expanding middle class, innovation, and regulatory support.

What is the significance of Insurance?

- **Mitigates Risk:** Life is unpredictable, and unexpected events can cause significant financial strain. Insurance helps manage risk by spreading the cost of potential losses among a large pool of policyholders.
- **Provides Financial Security:** in case of unforeseen circumstances. For instance, health insurance helps cover medical bills during emergencies, preventing you from going into debt.
- **Peace of Mind:** Knowing you have insurance coverage offers peace of mind. You can focus on recovery or rebuilding your life after a setback without the added worry of overwhelming financial costs.
- **Promotes Investment and Growth:** Insurance companies pool collected premiums, which are then invested in the financial markets. This investment fuels economic growth by providing capital for businesses and infrastructure development.
- **Supports Long-Term Goals:** Certain insurance plans, with a savings component, can help you achieve long-term financial goals like retirement planning or children's education.

What are the challenges faced by the Insurance Sector?

- **Low Penetration and Awareness:** Despite growth, insurance penetration remains low compared to global averages, especially in rural areas where awareness of insurance benefits is minimal.
- **Product Innovation Gap:** Insufficient access to high-quality data hampers the ability to develop innovative and customized insurance products, limiting the sector's ability to meet diverse customer needs effectively.
- **Human Resource Shortages:** Finding and retaining skilled professionals in actuarial, underwriting, and risk management roles is challenging.
- **Technological Challenges:** Integrating advanced technologies and ensuring cybersecurity are significant hurdles, with many insurers struggling to fully digitise their operations.
- **Market Competition and Pricing Pressures:** Intense competition and price sensitivity of customers often prefer low-cost policies, leads to aggressive pricing strategies, impacting profitability and making it difficult to balance affordability with comprehensive coverage.
- **Claims Management and Fraud:** Delays and inefficiencies in claims processing can erode customer trust, while high incidence of fraudulent claims increases operational costs and complicates management processes.

What are the initiatives taken to promote insurance sector?

- **"Insurance for All by 2047" Mission:** This government initiative aims to significantly increase insurance penetration in India by raising awareness and making insurance more accessible and affordable.
- **Foreign Direct Investment (FDI):** The government has increased the FDI limit in the insurance sector to 74%, attracting more foreign investment and promoting competition. This move is expected to bring in global expertise and best practices, further strengthening the industry.

- **Government Schemes:** Launch of insurance schemes like Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY), and Ayushman Bharat has significantly increased insurance coverage among the lower-income and rural populations.

- **Digital Transformation:** The IRDAI has pushed for the digitisation of the insurance industry. This includes initiatives like e-insurance accounts, online policy purchases, and digital claim processing, which have made insurance more accessible and customer-friendly.

- **InsurTech Development:** The growth of the InsurTech sector has been supported by initiatives like regulatory sandboxes and partnerships with technology firms. This has led to innovations in distribution channels, underwriting, claims processing, and customer service.

- **Bima Sugam Platform:** IRDAI has approved the establishment of Bima Sugam, a unified digital platform for all insurance products. This e-commerce platform aims to streamline the entire insurance process, from policy purchase to claims settlement, enhancing transparency and efficiency in the sector.

Way Forward:

- **Customer Education and Awareness:** Increase efforts to educate the public about the importance of insurance through targeted awareness campaigns, financial literacy programs, etc.

- **Encourage Product Innovation:** Using data analytics to identify gaps and create relevant products tailored to the needs of diverse customer segments, such as microinsurance for low-income individuals, parametric insurance for agriculture, and customised health insurance plans.

- **Strengthening the Grievance Redressal Mechanism:** to ensure quick and fair resolution of customer complaints. This includes improving the efficiency of platforms like IGMS and Bima Bharosa, and ensuring the accessibility of Ombudsman services.

- **Skilling:** Invest in training and development programs for insurance professionals to equip them with the skills needed to navigate a rapidly changing industry.

- **Fostering Collaboration:** between insurance companies, InsurTech startups, and other stakeholders. These partnerships can drive innovation, expand market reach, and improve service delivery.