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TAXATION

1. GLOBAL MINIMUM TAX RATE

Why in News?

- Organisation for Economic Co-operation and Development (OECD) released **Pillar Two model rules** for domestic implementation of **15% global minimum tax.**

Base Erosion and Profit Shifting

- Firms make profits in one jurisdiction, and shift them across borders by exploiting gaps and mismatches in tax rules, to take advantage of lower tax rates and, thus, not paying taxes to in the country where the profit is made.

About Global Minimum Tax Rate:

- A global corporate minimum tax requires to impose a **minimum rate of taxation** on large MNCs like **Google, Amazon, Facebook and Apple (GAFA)** to counter their efforts to escape taxes in their country of operations.
- **Objective:** This is being proposed to prevent MNCs from shifting profits to countries with lower tax rates in order to reduce their tax liabilities.
- Global Minimum Tax is part of the inclusive framework **on Base Erosion and Profit Shifting (BEPS)** agreed upon by **G20 countries and OECD.**
- Global Minimum Tax will apply to MNCs with revenue above €750 million and it aims for developing a taxation structure that is relevant for a digital and globalised world.

Challenges in implementing global minimum tax rate:

- **Global consensus** as small economies benefited a lot from attracting investments with low corporate tax, helping to compete against large and developed economies with better infrastructure quality, labor quality, economic and political stability etc.
- **Impact on socio-economic development** as countries use tax incentives to attract MNCs to gain FDI and generate demand with efficient utilisation of resources and create employment.
- **Consensus on tax rate** as 15% rate is lower than what working-class and middle class people typically pay in high-income countries (World Inequality Report). It is also lower than the average statutory rate that corporations face in those places.
- **Reduced ability to pursue specific policy objectives** by governments through tax incentives, such as promoting innovative activities via investment tax incentives or tax incentives for R&D.
- **Favoring rich nations** as G7 and EU will take home two-thirds of new cash that GMT will bring in, while the world's poorest countries will recover less than 3%, despite being home to more than a third of the world's population (Oxfam report).
- **Ban on unilateral taxes** as implementation of these new taxing rules being conditioned upon them removing all unilateral taxes on technology companies. **E.g. Equalization Levy by India.**

Implications on India:

The global minimum tax rate proposal could have significant implications for India, both positive and negative.

Positive side	Negative Side
⊙ **Increased Tax revenue:** A global minimum tax rate could help prevent multinational corporations from avoiding taxes in the country. ➤ This would help to increase the tax revenue of the Indian government, which could then be used for public services, infrastructure development, and other initiatives. ⊙ **Attracting foreign investments**: It could also help India in attracting foreign investment, as it could make the country more attractive to companies looking to invest in a country with a stable and predictable tax regime.	⊙ **Less competitive**: The proposal could make it more difficult for India to attract foreign investment if the minimum tax rate is set at a **high level**, as it could make India less competitive compared to countries with lower tax rates. ⊙ **Tax erosion:** There is also a possibility that the proposal could lead to the erosion of India's tax base, as multinational corporations could choose to shift their profits to countries with lower tax rates.

A global minimum tax is a laudable attempt to make international tax arrangements fairer and work better in a digitalised and globalised world economy. However, there are major obstacles that may impede the overall implementation of the agreement.

Practice Question

Q. Discuss the concept of a global minimum tax rate in the context of international taxation and its potential implications for global economic stability.

2. GOODS AND SERVICES TAX

Context: The economies of half-a-dozen states are set to be “most severely affected” because of the termination of the **goods and services tax compensation programme**, a Reserve Bank of India report on state finances said.

THE BASICS: GST

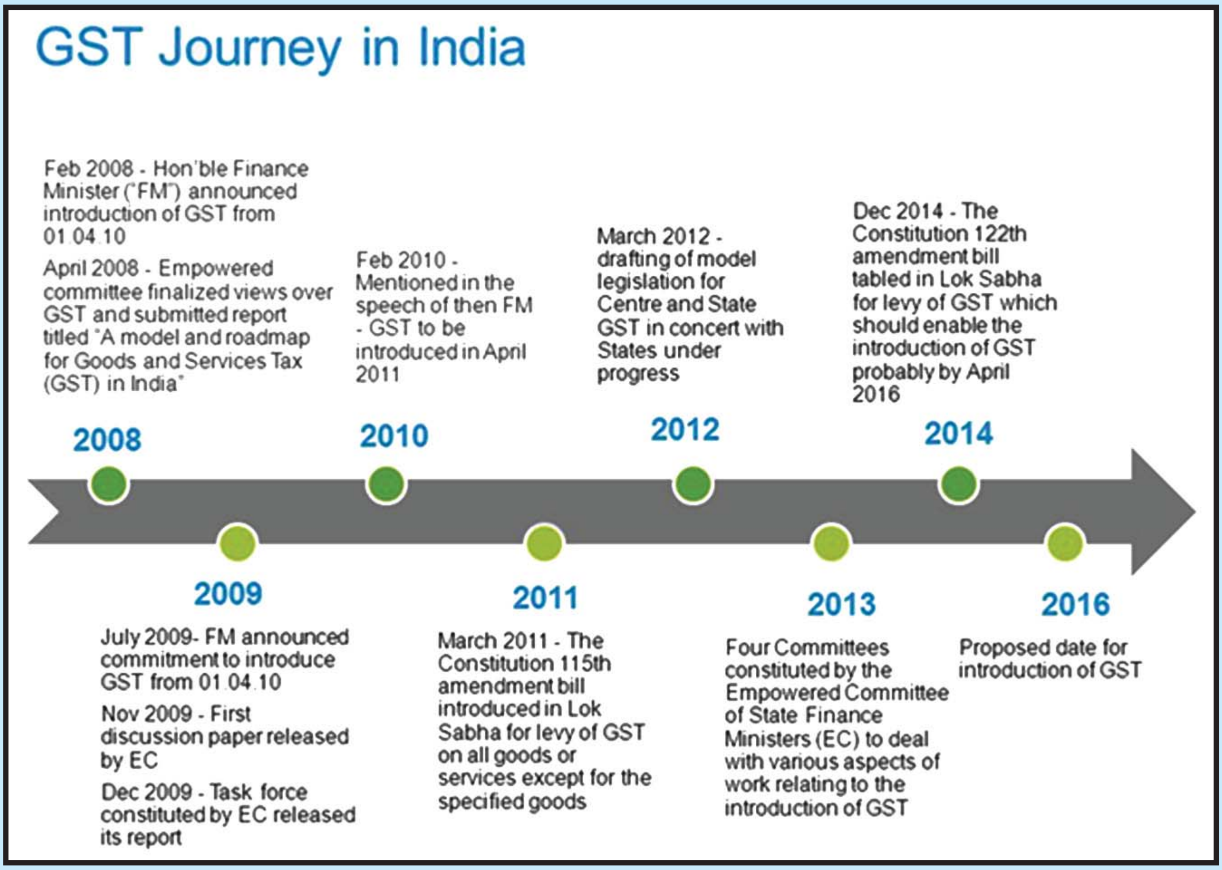
About GST:

GST also known as the Goods and Services Tax is a comprehensive, multi-stage, destination-based tax that is levied on every value addition. GST, being a transactional tax, was directly impacted by the slowdown that reduced revenue collection, thus decreasing the compensation outflow to the States — the trigger that led to a situation of mistrust among the states towards the GST council.

Key Features of GST:

- **GST Rates:** The States and Centres have mutually decided upon the GST rates levied on goods or services through CGST, SGST, and IGST under the aegis of the GST Council. The four tax slabs under GST are 5% (for consumer durables), 12% (general rate), 18% (general rate), and 28% (luxurious goods). However, the rate of GST for exports and supplies to the Special Economic Zones (SEZs) is 0%.
- **Applicability of GST:** The Goods and Services Tax applies to the whole country (India).
- **Consumption-Based Tax:** Earlier, the taxes were based on the principle of origin-based taxation. However, the Goods and Services Tax is a destination-based consumption tax, which means that the taxes will be received by the states in which the goods or services have been consumed. As the tax is received by the consumer State, the losses faced by Producer States are compensated by the Centre.
- **Applicable on Supply of Goods and Services:** Earlier, the taxes were charged on the basis of ‘tax on the manufacture or sale of goods or on the provision of services; however, the Goods and Services Tax is charged on the basis of Supply of Goods and Services.

- **GST on Imports:** The imports of goods and services come under IGST and is treated as Inter-State Supplies. IGST is charged on the imports of goods and services in addition to the applicable customs duties.
- **Payment of GST:** The taxpayers can make payment of GST through different modes, like Internet Banking, NEFT (National Electronic Funds Transfer)/RTGS (Real Time Gross Settlement), and debit/credit cards.



Reasons why GST was considered to be a revolutionary step:

- **Elimination of cascading effect of taxes:** Under GST, the tax levy is only on the net value added at each stage of the supply chain. This has helped eliminate the cascading effect of taxes and contributed to the seamless flow of input tax credits across both goods and services.
- **Curb Tax Evasion:** Under GST, taxpayers can claim an input tax credit only on invoices uploaded by their respective suppliers. This way, the chances of claiming input tax credits on fake invoices are minimal. The introduction of e-invoicing has further reinforced this objective.
- **Increases Taxpayer Base:** Previously, each of the tax laws had a different threshold limit for registration based on turnover. As GST is a consolidated tax levied on both goods and services both, it has increased tax-registered businesses.
- **Improve logistic and distribution system:** GST minimizes transportation cycle times, improves supply chain and turnaround time, and leads to warehouse consolidation, among other benefits. With the e-way bill system under GST, the removal of interstate checkpoints is most beneficial to the sector in improving transit and destination efficiency.

Ways in which GST empowers citizens:

- **Reduction in overall tax burden:** It is expected that the tax burden on industries and trades will be reduced, which will result in an increase in consumption and a decrease in the price of goods and services. The ultimate result of this change is expected to be an increase in the production level and development of the industries.
- **No hidden taxes:** As GST is replacing all indirect taxes with one tax, there are no chances of a hidden tax within the invoice of the goods and services. For example, if a commodity costs ₽500, it means that the overall cost of the commodity is ₽500 without any hidden taxes.

- **Development of a harmonised national market for goods and services:** Harmony in tax rates, laws and procedures simplifies its compliance. The common interface of the GST portal brings synergy and efficiency to the filing of taxes. Earlier, service tax and VAT had their own returns and compliances, which was time-consuming. However, GST merges both compliances and lowers the number of returns, ultimately reducing the time spent on these compliances.
- **Higher disposable income in hand:** Disposable income is the money at hand left with the consumer after making all expenses. As GST has reduced the tax burden on the taxpayers, it will increase their disposable income.
- **Customers have a wider choice:** Earlier due to cascading effect, the customer used to have less disposable income at hand to spend on goods and services. But, the reduction in prices of goods and services, and tax burden has increased the disposable income of the consumers giving them a wide choice while purchasing goods and services.
- **Increased economic activity:** Reduction in prices of goods and services, increase in disposable income of consumers, and decrease in the price of goods and services is leading the consumers in performing economic activities.
- **More employment opportunities:** With the implementation of GST, the manufacturing of goods has become simplified, resulting in an increase in the number of manufacturers and industries. More industries will bring employment opportunities to the country, benefiting the citizens of India.

Growing mistrust on issue of GST Compensation:

- It was ensured to the states by the Centre that the state's revenue will grow increase on year by 14%, which ultimately did not happen as our economy was growing at just under 7%.
- The states were promised that the shortfall in revenues, which did not match the projected growth, would be made by the centre, which did not happen ultimately due to shortfall in revenue collection and delay in procedure and policy implementation.
- The shortfall in revenue was to be met by compensation cess which was levied on sin goods. This feature ensured that the states agreed to give up their fiscal autonomy.
- In 2019-2020 the economy did not grow at the expected rate coupled with the centre's decision to reduce GST on some goods and services from 28% to 12% accentuated the problem of revenue collection and there were difference in opinions of states as they supported policies best suited for their state.
- The delay in the release of compensation cess, has caused friction, with some states accusing the Centre of using the financial distress as an opportunity to fulfill an "ulterior agenda".

Suggestions to overcome the issue:

Above all, the GST structure needs an overhaul for the revenue-enhancing promise to be met. The union still has an opportunity. It can at minimum do three things:

- **First,** reaffirm its commitment to cooperative, consultative principles of federalism by reforming the functioning of the GST Council. In the run-up to last week's meeting, several states made suggestions on improving the functioning of the council. A special council meeting to debate these suggestions must be called.
- **Second**, offer the compensation cess as a transfer, not a back-to-back loan with the caveat that the compensation rate will be re-negotiated.
- **Third,** be transparent about the current macro-economic scenario through an honest appraisal that revisits revenue projections and offers a set of strategic pathways for consultation with states through a special session between the Union Finance Minister and state finance ministers.

After dismantling of the Planning Commission, the GST Council is the only federal body that brings together the Centre and the States to discuss fiscal matters. Addressing the contentious issues will, first and foremost, require bridging the trust deficit between the Centre and states. The spirit of cooperative federalism, often advocated by the ruling dispensation, must be upheld.

Practice Question

Q. Discuss the impact of the COVID-19 pandemic on the GST compensation fund, highlighting the resulting federal tensions in India's fiscal architecture.

PYQ

Q. Explain the rationale behind the Goods and Services Tax (Compensation to States) Act of 2017. How has COVID-19 impacted the GST compensation fund and created new federal tensions? (2020)

Q. Enumerate the indirect taxes which have been subsumed in the goods and services tax (GST) in India. Also, comment on the revenue implications of the GST introduced in India since July 2017. (2019)

Q. Discuss the rationale for introducing Goods and services tax (GST) in India. Bring out critically the reasons for the delay in roll out for its regime. (2013)

3. CARBON TAX

Context The European Union (EU) has formally notified the implementation of Carbon Border Adjustment Mechanism (CBAM) at the WTO members of the committee on trade and environment.

About

- European Union (EU)'s carbon tax is to be levied on imports of products that rely on non-green or sub-optimally sustainable processes and where carbon emissions are deemed to have not been adequately priced.
- This Carbon Border Adjustment Mechanism (CBAM) will begin with an import monitoring mechanism and culminate in the levy of duties as determined from January 2026.
- The EU argues that the CBAM will ensure its climate objectives are not undermined by carbon-intensive imports and spur cleaner production in the rest of the world.

A **carbon tax** is a type of penalty that businesses must pay for excessive greenhouse gas emissions. The tax is usually levied per ton of greenhouse gas emissions emitted.

Impact

- CBAM or carbon tax is seen as a protectionist move made by Europe and is feared to impact $8 billion worth of Indian exports, especially steel and aluminum sector.
- The law could raise trade tensions between India and the EU.

India exports iron ore and steel to EU, with carbon levies estimated to range from 19.8% to 52.7%.

Why the burden would be more on developing countries (like India)?

China, the **world's biggest greenhouse gas emitter**, has **opposed the CBAM** as a trade barrier, while it is also planning to develop its own emissions trading market.

- **Expensive affair for developing nations:** CBT will depend on the **carbon price** paid in the home country and the **production process**. Since most developed country industries would pay **high carbon prices** in their home countries, the tax rate will be zero or low.
- **Trade diversion:** CBT will create **FTA-like trade diversion effect**. Even though a product from India may be cheaper than an American product, tax plus product price will make Indian products more expensive. This will lead to the EU firms sourcing more from developed countries. Thus, the trade will divert to costlier suppliers.

Practice Question

Q. Do you think putting a price on greenhouse-gas emissions is the best way to tackle climate change? Justify your answer.

2

AGRICULTURE

1. MINIMUM SUPPORT PRICE (MSP)

Why is news?

Government reopens window for farmers to sell mustard at MSP post dip in prices.

About MSP:

- Minimum Support Price (MSP) is a **government-supported agricultural pricing policy** in India that aims to protect farmers from fluctuations in market prices and ensure a stable income for them.
- **Genesis:** It was introduced in the 1960s as a part of the **Green Revolution** to promote agricultural growth and food security.
- Announced at the **beginning of each crop season**, the MSP is based on the recommendations of the **Commission for Agricultural Costs and Prices (CACP),** which takes into account the cost of **production, market prices**, and other factors such as **inflation and demand-supply situation**.
- However, the MSP regime has faced several inefficiencies over the last decades, causing many to question its utility. In the last few years, the idea of bringing a legally backed MSP has also gained momentum the benefits and negative impacts of which are still being debated.

Inefficiencies plaguing the MSP regime in India:

- **Implementation challenges:** MSP is announced for 23 crops every year, but the procurement in terms of percentage of crop production remains uneven. **For example**, only 1% of coarse grains and 12% of pulses produced were procured in 2019-20 compared to 43% of rice and 36% of the wheat.
- **Market distortion: Economic Survey 2020** pointed out that the MSP distorted market of the food grains by creating artificial demand and supply in the country.
- **Regional variation in capability in procurement:** Green Revolution states like Punjab and Haryana have strong procurement system in place while the eastern states of Bihar, Odisha etc. have limited capabilities.
  - **Example:** In Punjab, 87% of the rice, wheat produced was procured compared to just 15% in Uttar Pradesh.
- **Low reach, small farmers left behind:** According to the **Shanta Kumar Committee,** MSP covers just 6-10% of the farmers, mostly the medium and large farmers, which creates wide inequality within the agriculture sector.
- **Ecological and environmental challenges:** MSP has resulted in distorted cropping patterns in the country causing environment challenges. **Example:** Paddy, a water intensive crop, is grown aggressively in water stressed state of Punjab because of the high MSP. This has led to severe depletion of ground water level in the state.
- **Other issues:** Issue related to the basis of calculation of MSP, delayed payments to farmers etc.

Benefits for farmers	Concerns regarding the MSP system
• **Stable income:** It provides them with a stable source of income and protects them from the volatility of market prices. • **Guaranteed return:** It also encourages them to invest in agriculture by providing them with a guaranteed return on their investment. • **Stabilized food prices**: MSP helps to stabilize food prices and ensures the availability of food grains in the market. • **Controlling instrument**: An instrument to control the production quantities of various crops to match demand. • **Self-sufficiency:** The country could also become self-sufficient in edible oils and pulses if we ensure remunerative MSPs for these crops. • **Food Security**: It will further increase the food security of the nation with the growth in the population.	• **Overproduction:** It has led to overproduction of certain crops and distorted the market by discouraging farmers from diversifying their crops. ➤ FCI stocks are way above the stipulated limit causing additional burden on the exchequer and high rate of wastage as well. • **Wastage:** The cost of procurement and storage of excess food grains, which can lead to wastage and inefficiencies in the system. • **High fiscal burden on the government** • **Implementation challenges:** Mandatory MSP will cause logistical challenges. States with weak institutional capacities will face additional burden. • **Politicization of the issue:** The issue around the MSP has created a strong political lobby that is not always in interest of the farmers.

Agriculture employs almost half the labor force and is fundamental for economic growth of the country and achieving SDG 1 and 2 related to poverty reduction and food and nutrition security. MSP legally backed or not, is not a guarantee to achieve that. The way forward to support the famers in sustainable manner is to invest in agri-R&D, agricultural-extension systems, and connect farmers to lucrative markets, domestic and external, by building efficient value chains.

Practice Question

Q. Evaluating the effectiveness of Minimum Support Price (MSP) in ensuring income security for farmers, highlight the challenges faced in determining and implementing MSPs.

PYQ

Q. What do you mean by Minimum Support Price (MSP)? How will MSP rescue the farmers from the low income trap? (2018)

2. PRIMARY AGRICULTURAL CREDIT SOCIETIES

Context: India is all set to establish 2 lakh primary agricultural credit societies over 5 years. Union Cabinet approved the establishment of viable PACS and dairy and fishery cooperatives with an outlay of Rs. 20 Lakh crore.

The Basics: Primary Agricultural Credit Societies (PACS)

About PACS:

Primary Agricultural Credit Societies (PACS), being registered cooperative societies, have been providing credit and other services to their members. PACS generally provide the following facilities to their members:

- Input facilities in form of cash or kind component
- Agriculture implements on hiring basis
- Storage facility

Cooperative agricultural credit structure

Cooperative Credit Insitutions

- **Rural Co-operative Credit Institutions**
  - **Short term Structure**
    - **State Cooperative Bank**
    - **District Central Cooperative Bank**
    - **Primary Agricultural Credit Societies**
  - **Long term Structure**
    - **State Cooperative Agriculture & Rural Development Banks**
    - **Primary Cooperative Agriculture & Rural Development Banks**
- **Urban Co-operative Banks**

- PACS constitute the lowest tier of the short-term cooperative credit (STCC) structure in the country
- They are outside the purview of the Banking Regulation Act, 1949 and are not regulated by the RBI. However, State cooperative banks and District central cooperative bank are registered under the provisions of State Cooperative Societies Act of the State concerned and are regulated by the RBI.
- They are refinanced by NABARD through State cooperative banks and District central cooperative banks.
- PACS account for 41 % of the KCC loans given by all entities in the Country and 95 % of these KCC loans are to the Small and Marginal farmers.

What makes PACS attractive?

- **Last mile connectivity:** For farmers, timely access to capital is necessary at the start of their agricultural activities. PACS have the capacity to extend credit with minimal paperwork within a short time.

- PACS constitute the lowest tier of the three-tier **Short-term cooperative credit (STCC)** in the country comprising of 13 Cr. farmers as its members, which is crucial for the development of the rural economy.
- PACS account for 41 % (3.01 Cr. farmers) of the KCC loans given by all entities in the Country and 95 % of these KCC loans (2.95 Cr. farmers) through PACS are to the Small and Marginal farmers.

- **Simplification of paperwork:** With other scheduled commercial banks, farmers have often complained of tedious paperwork and red tape. For farmers, PACS provide strength in numbers, as most of the paperwork is taken care of by the office-bearer of the PACS.
- **Promotes inclusion:** In the case of scheduled commercial banks, farmers have to individually meet the requirement and often have to take the help of agents to get their loans sanctioned. NABARD's annual report of 2021-22 shows that 59.6 per cent of the loans were extended to the small and marginal farmers.

Note: As cooperative societies are not considered to be as banks, the deposit cover from deposit insurance and credit Guarantee Corporation (DICGC) is also not available for deposits placed with these societies.

Challenges associated with PACS:

- **Shortage of funds:** Its working capital is low and insufficient due to which they are unable to meet their requirements. As a result, these societies face a significant financial dilemma and are unable to pursue their job properly.
- **Politicized nature:** Because politicians employ cooperative societies as a vote bank, these society can be easily exploited by politicians.

- **Credit Share:** Over time, the share of credit cooperatives in rural credit have declined to 1/3rd from a share of more than 60% in the 1950s.
- **Regional imbalance in growth:** The cooperatives in northeastern areas and in areas like West Bengal, Bihar, Odisha are not as well developed as the ones in Maharashtra and Gujarat.
- **Lack of fair audit mechanism:** Delay, and irregular audits impinge upon the democratic spirit of cooperative movement.
- **Inadequate resources:** The resources are too inadequate in relation to the short-and medium-term credit needs of rural economy. The bulk of even these inadequate funds come from higher financing agencies and not through owned funds of societies or deposit mobilization by them.
- **Overdues:** Large over-dues have become a big problem for the PACS. They check the circulation of loanable funds, reduce the borrowing as well as lending power of societies, and give them the bad image of the societies of defaulting debtors are willful. Bigger landowners take undue advantage of their relatively stronger position in villages in both appropriating cheaper cooperative credit and not paying back their loans in time.

PACS helps in fulfilling the financial requirements of its members, so their work should not be stopped due to the unavailability of the finances. It makes the loan requirements of farmers and thus helping them in growing their business. The resource-mobilization ‘Capacity of the PACS will improve substantially if, through reorganization and related measures, they are converted into strong and viable units. Then, they should be able to attract both more deposits and more loans from higher financing agencies.

Practice Question

Q. Evaluate the role and functioning of Primary Agricultural Credit Societies (PACS) in India's rural credit system.

3. LPG REFORMS AND AGRICULTURE SECTOR

Syllabus Map: effects of 1991 reforms on Indian Economy (agricultural sector).

Context: The new model of economic reforms, commonly known as the **LPG or Liberalization, Privatization, Globalization model,** is believed to have had limited influence on Indian agriculture. More significantly, policy reforms in the farm sector have not yielded the anticipated outcomes.

About

Reforms in agricultural policies during the LPG reforms of 1991 were felt necessary for achieving trade liberalization in the agricultural sector. An overview of Indian agricultural sector indicates that globalization did not yield the desired results in India. It has marginally contributing in minimizing poverty, and removing social inequalities.

Positive impact of LPG reforms on Indian agriculture:

- **Modern Agro- technologies:** There is availability of modern agro technologies in pesticides, herbicides, and fertilizers as well as new breeds of high yield crops were employed to increase food production. Use of High Yielding Varieties (HYVs) like **IR8** a **semi-dwarf rice variety** significantly outperformed traditional varieties in the presence of adequate irrigation, pesticides, and fertilizers.
- **Rise in production and productivity:** Due to adoption of HYV technology the production of food grains increased considerably in the country.
    - The production of wheat has increased from 8.8 million tonnes in 1965-66 to 184 million tonnes in 1991-92.
- **Growth of National Income:** New technology, new seeds, new agriculture practices etc. helped to grow the agricultural product. From the monetary point of view the share of agriculture sector in the economy is raised to 14.2% of the GDP (2010-11).
- **New areas of employment:** After LPG the agro allied industries has created employment in various sector like packing, exporting, standardizing, processing, transportation and cold storage etc.
- **Rise in the share in trade:** Because of the conditions of WTO all of the countries get the same opportunities, so there is an increase in the export of agricultural products.

Negative impacts of LPG reforms on Agriculture:

- **Migration of labours:** The domestic farmer could not stand the competitiveness of international market, which has resulted in migration of labor from agriculture to other industrial activities.
- **Vicious debt cycle and farmers suicide:** The **National Sample Survey Organization (NSSO) Report 2005** indicates that 1 in 2 farm households are in debt, 32.7 per cent of farmers still depend on money lenders falling into their exploitative policies. The National Crime Records Bureau reports that between 1997-2005 1,56,562 farmers committed suicide.
- **Lessening international competitiveness:** Because of marginal land holding the production cost of Indian farmers is higher as well as the quality and standardization of agro produce is much neglected. Along with this, the curtailment in subsidies and grants has weakened the agricultural sector. On this background the farmers in India are not in a position to compete in international market.
- **Abnormal hike in Fertilizers and Pesticide prices:** Immediately after globalization, Indian rupee was devaluated by 25%, which led Indian farmer for export and encouraged them to shift from growing a mixture of traditional crops to export oriented cash crops like chilli, cotton and tobacco. These need far more inputs of pesticides, fertilizers and water than the traditional crops require. It automatically increased fertilizer and pesticide prices by 300%.
- **Fall in agricultural employment:** In 1951, agriculture provided employment to 72 per cent of the population and contributed 59 per cent of the gross domestic product. However, by 2001 the population depending upon agriculture came to 58 per cent whereas the share of agriculture in the GDP went down drastically to 24 per cent and further to 22 per cent in 2006-07. This has resulted in a lowering the per capita income of the farmers and increasing the rural indebtedness.

An overview of Indian agricultural sector indicates that globalization did not yield the desired results in India. Without taking into account the state of an economy, and the state and nature of the agricultural sector in India, **the IMF and the World Bank**, with the cooperation of the Indian government, embarked on mismatched reforms, which have caused misery and despair among millions of Indian farmers, driving large numbers of them to suicide.

Practice Question

Q. Discuss the opportunities and challenges faced by the agriculture sector in the wake of LPG reforms and the subsequent integration with the global economy.

4. ROLE OF AGRICULTURE STARTUPS IN ENHANCING PRODUCTIVITY AND FARM INCOME:

Context: To support agro startups, Finance Minister has announced the **Agriculture Accelerator Fund.** It would attempt to implement cost-effective solutions to problems encountered by farmers by introducing contemporary technologies and boosting output.

Importance of Agriculture startups:

- Agriculture startups, part of India's wider startup ecosystem which is the third largest in the world, have been contributing the growth of the sector in tremendous manner.
- **Innovative and affordable solutions:** They use innovative technologies like precision farming, smart irrigation systems, and weather-based advisory services to optimize crop yield and minimize wastage.
- **Strengthening the supply chains and logistics**: They incorporate technology to streamline the distribution of agricultural produce and reduce the number of intermediaries involved in the supply chain. **Example:** Online grocers like Swiggy can expand their reach to source the produce.
- **Real-time data and insights to farmers:** This helps farmers make informed decisions regarding seed selection, fertilizer application, and pest management thus increasing the productivity and profitability.
- **Access to credit and financing:** Agricultural startups provide farmers with access to financial services and products like microfinance and crop insurance.
- **Employment generation away from agriculture:** This can reduce the issue of disguise employment in Indian agriculture.

Agriculture Accelerator Fund:

The Fund has been announced in the Union Budget 2023-24 with the aim to encourage agri-startups by young entrepreneurs in rural areas.

Benefits of Agriculture Accelerator Fund for the agri-startups:

- **Provides a supportive environment:** It that can help agri-startups to grow faster by providing them with resources, exposure, and opportunities to succeed. This can further accelerate the pace of innovation in a sector.
- **Fast- track agricultural entrepreneurial activity:** The success of startups in the tech sector can be replicated with the help of the Fund.
- **Higher investment in the sector:** The move can turn agri-tech into a 'sunrise sector' which can attract investments from diverse sources.
- **Better connectivity with the farmers:** Budget has also announced a Digital Public Infrastructure which coupled with the Fund would help the agri-tech startups to connect with more farmers and in turn enable them to realize better value for their produce. This will in turn enable the famers to realize better value for their produce.

Agriculture in India is facing several challenges like low productivity, low profitability etc. Climate change and pressure of population is putting additional pressure. In this scenario, role of agri-startups in modernizing and improving the traditional agricultural sector can't be neglected which need favorable policy support themselves. Agriculture Accelerator Fund is right steps in that direction. Additional steps like overcoming the structural issues, strengthening the supply chain etc. are needed for the holistic development of the sector.

Practice Question

Q. Evaluate the impact of technology-driven solutions, market linkages, and financial support provided by agriculture startups on improving agricultural practices, increasing yields, and enhancing the income of farmers.

5. NEED FOR INDIA TO MULTIPLY INVESTMENT IN AGRICULTURAL RESEARCH AND DEVELOPMENT

Context: India has surpassed China to become the most populous country which puts an additional pressure on agriculture to match up with the demand.

Background:

- Climate change affects the agriculture sector in more than one way.
- A rise in temperature affects the yields of the crops, increases the plant disease among other challenges while increase in the extreme weather events causes huge loss to farmers making it non-remunerative, especially in the backward regions.
- On the other hand, continued population expansion – India's population is expected to rise to **1.5 billion by 2030** – coupled with shrinking cropped area puts additional pressure on agriculture to match up with the growing demand of food and nutrition security.
- In the face of the twin challenges, a higher investment in agricultural research and development becomes important.

Why R&D is critical?

- **The objectives of agricultural R&D are:**
  - **crop diversification** (from rice and wheat to maize, millets, pulses and oilseeds)
  - **crop rotation** (for soil health and pest management)
  - **cultivation with no or minimal soil disturbance** (to conserve water, improve soil health and avert tractor emissions)
  - **doubling the productivity** of livestock and crops

Current status of agriculture R&D investment in India:

- At present, the government spend 0.4 percent of agricultural GDP on agricultural R&D.
- The allocation was in the tune of Rs 9000 crore in FY 2021-22 which is very low compared to a private global company like Bayer which spends almost Rs 20,000 crore every year on agri-R&D.

Ways in which higher investment in R&D help tackle the challenges:

- **Better yield and productivity:** The average yield of wheat in India is one-third of France currently. There is huge potential to increase it with the help of technological and mechanical interventions.
- **Higher return on investment:** R&D expenditure acts as capital expenditure and marginal returns in terms of agri-growth from expenditures on agri-R&D are almost five to 10 times higher than through subsidies.
- **Higher resilience:** The temperature rise results in higher rate of plant and livestock disease causing further stress. This can be averted by better monitoring and timely intervention through research on plant and livestock genetics.
- **Development of new farming techniques:** Example- Hydroponics offers a pathway towards a more sustainable food system in the field of horticulture.
- **Development of better seed varieties:** Biotechnology plays an important role in creating genetically modified organisms (GMOs) which has increasingly been used in agriculture. Genetically engineered golden rice variety has been developed with increased nutritional value.
- **Sustainable productivity in the long-term:** Agriculture is impacted by the environment degradation and is also a cause of it. Intervention like crop-diversification, higher efficiency in the inputs like water and fertilizers is the need of the hour.
- **Reduction of post-harvest losses:** According to the FAO, the post-harvest losses in India are as high as 40%. This can be reduced by developing varieties with higher shelf life and technological intervention like food irradiation.
- **Other benefits:** Like the development of food processing sector, improved digitization, higher market efficiency, and interventions specific to micro-regions.

Agriculture in India is crucial for the sustainable growth as well as achieving various **SDGs 1 and 2** related to **poverty and hunger** respectively. Thus, the expenditure on agri-R&D needs to be doubled or even tripled in the coming years agriculture has to provide food and nutrition security and achieving resilience in the face of climate change. But it will not be enough. It should be complemented with structural reforms, predictable policies and efficient market infrastructure.

Practice Question

Q. Discuss the significance of increasing investment in agricultural research and development (R&D) in India. Also, suggest policy measures to promote increased investment in agricultural R&D and the potential impact on the overall agricultural sector in the country.

6. PRADHAN MANTRI KISAN SAMMAN NIDHI (PM-KISAN)

Context: Several farmers have benefited from the introduction of the **Pradhan Mantri Kisan Samman Nidhi (PM-KISAN),** which offers financial support to all landholding farmer families in the country who have arable land.

About PM-KISAN

- Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) is an **income support scheme** under which the eligible beneficiary farmer families are provided with Rs 6,000 annually and the amount is transferred in their bank accounts directly.
- **Objective:** The scheme is aimed at boosting rural consumption and helping poor farmers recover from distress.
- **Addressed issues:** PM-KISAN has addressed the **liquidity constraints of farmers** for buying agricultural inputs, daily consumption, and other incidental expenses.
- **Gaps:** But, it has somewhat **failed to cater to the needs of landless agricultural laborers and tenant farmers.**

Features of PM Kisan Samman Nidhi Yojana:

- **Income Support:** It provides the minimum income support to farmers.
  - Each eligible farmer family is entitled to receive Rs.6000 per annum across India. However, the amount is not disbursed at once. Instead, it's divided into three equal instalments and meted out four months apart. Each farmer, thus, receives Rs.2000 every 4 months.

- **Funding:** The entirety of its funding comes from the Government of India. Initially, it announced a reserve of Rs.75000 crore a year to be spent on this initiative.
- **Identification Responsibility:** While the responsibility of funding lies with GOI, the identification of beneficiaries is not under its purview. Instead, it's the responsibility of the State and Union Territory governments. Here, it is crucial to note that per **PM Kisan Samman Nidhi Yojana** definition, a farmer's family shall comprise a husband, wife, and minor child or children.

Shortcomings of the scheme:

- **Issue in the identification:** A majority of the States have incomplete tenancy records and land data are not digitized (for instance, in Jharkhand, Bihar, Gujarat and Tamil Nadu, making identification of beneficiaries is daunting. The exclusion is very high in UP.
- **Absence of updated land records and complete databases:** Thus, benefitting only those who hold land titles and not the small, marginal or tenant farmers who are the most vulnerable.
- **Lack of effective framework for grievance redressal:** The scheme does not provide a clear design of transfers and a framework for effective grievance redressal.

Suggestive measures to overcome the inefficiencies:

- **Proactive role of Banks:** Banks involved in primary sector lending or disbursement of crop loans, etc. need to be sensitized properly on their critical role in implementation of **PM-KISAN.**
- **Strengthening IT backbone:** With ICT usage and direct transfer of money to farmers' bank accounts, pilferage would also be less.
- **Targeting benefits and updation of land records:** Involvement of Gram Panchayat is the key here.
- **Indexing the income support with inflation:** This will give better cushion to the farmers to cope up with the financial challenges.
- **Well-planned implementation mechanism:** It would allow weaknesses to be identified and rectified at the local level.

PM-KISAN is an ambitious scheme that has the potential to deliver significant welfare outcomes and provide much needed relief to farmers. However, there is a need to take supportive measures that strengthens the scheme while plugging the loopholes. An alternative bottom-up strategy and well-planned implementation mechanism should be worked to fulfill the vision of the scheme.

Practice Question

Q. Evaluate the objectives, implementation, and impact of the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme in India. Also, critically examine the potential long-term implications of PM-KISAN on the agriculture sector and the overall economy.

7. MICRO-IRRIGATION FOR DEPLETING WATER RESOURCES

Context: Successful micro-irrigation project to be replicated in seven more districts in Kerala.

What is micro-irrigation?

Micro-irrigation is an irrigation method with lower water pressure and flow than a traditional sprinkler or flood irrigation system. In this mechanism water is applied directly to the roots thus minimizing the run-off and evaporation. **Drip irrigation, sprinkler irrigation, spray irrigation**, **subsurface irrigation, and bubbler irrigation** etc. are the example of micro-irrigation.

Need for micro-irrigation:

Water resources in India are under tremendous pressure due to rise in population coupled with increasing food demand. India's per capita water availability has come down to **1,486 cubic metre in 2021 from 1,820 cubic metre in 2001** and is expected to decline further. As the agriculture sector is the largest consumer of water in India accounting for almost **90% annual freshwater withdrawals**, micro- irrigation provides the way forward.

Advantages of Micro-irrigation	Disadvantages of Micro-irrigation
• **Higher water use efficiency**: By applying water directly to the root zone, the practice reduces loss of water through conveyance, run-off, deep percolation and evaporation. Thus reaching the water use efficiency as high as 75-95% compared to current 40% India has with traditional practices. • **Better yield, increase in productivity:** Adoption of micro-irrigation systems helps boost the yield of fruit as well as vegetable crops. • **Higher nutrient uptake**: It results in balanced nutrient application, reduced fertilizer requirement, higher nutrient uptake and nutrient use efficiency. • **Reduction of soil degradation:** It avoids large run-offs which coupled with efficient fertilizers use protect the top layer of the soil. • **Less consumption of electricity and labour** • **Promotes sustainable agriculture**	• **Expensive initial cost** • **High maintenance:** The sun can affect the tubes used for drip irrigation, shortening their usable life. If the water is not properly filtered and the equipment not properly maintained, it can result in clogging • **Waste of water, time & harvest**, if not installed properly • Systems require careful study of all the relevant factors like land topography, soil, water, crop and agro-climatic conditions, and suitability of drip irrigation system and its components • **Salt piling:** Without sufficient leaching, salts applied with the irrigation water may build up in the root zone. • **Poor economy of scale in Indian conditions**: Very low average landholding sizes in India (1.08 ha) coupled with poor financial conditions of Indian farmers decreases the economy of scale of the system.

India is facing the twin challenge of water scarcity and population expansion. **Around 85% farmers are small and marginal and 60% agriculture** is dependent of monsoon. Global warming and rise of extreme weather events further exacerbate the situation. In this scenario, micro-irrigation assumes significance. Government should learn from the success of countries like Israel which has exploited micro-irrigation practices to its advantage.

Practice Question

Q. Examine the significance of micro-irrigation techniques in addressing the challenges of depleting water resources in India. Assess the role of government policies, financial incentives, and technological advancements in promoting the widespread adoption of micro-irrigation.

8. FARM SUBSIDIES

Context: India is spending huge sums of money on incentivising and subsidising farmers to adopt new technology and also increase incomes.

About farm subsidies:

Farm subsidies in India include **fertilizers subsidy, power subsidy for irrigation, Minimum Support Price (MSP)** among others. These subsidies were introduced as incentives to increase food production during the Green Revolution phase and to avoid financial distress to the farmers.

The support given by governments to the agricultural sector can be categorised as **market distorting** and **non-market distorting**. Market distortion means any interference that significantly affects prices of inputs like fertiliser and water or output like procurement of paddy and wheat at the Minimum Support Price (MSP) from farmers.

Rationale behind subsidies

- **Increased food production of the country**: Subsidies have helped the country to become one of the largest food grain producers globally. They make inputs affordable to farmers who cannot buy them, owing to poverty, lack of access to credit etc.
- **Food security:** Subsidies play an important role in the overall food security of the nation and the poor and marginalized section of the population.

- **Cushion to the farmers during distress:** During the volatility in the market MSP helps farmers to avoid distress sale. They act as a tool of equity between rich and poor farmers.
- **Protection from external shocks:** Subsidies protect Indian farmers amid the high fertilizers and energy prices.

Failure of subsidies to increase the farm income

- **High subsidies means low capital investment on agriculture**: High agriculture subsidies cause high burden on exchequer thus squeezing the budget in more productive areas like R&D investment and infrastructure development. These subsidies also have crowding out impact on private investment.
  - **For ex:** This year's fertiliser subsidy is likely to cross ₽2.76-lakh crore.
- **Subsidies are not permanent solutions**: Though subsidies act as a short-term relief measure during distress period like market failure, they are not a permanent solution.
- **High inequality in agriculture**: Small and marginal farmers (owning less than 2 ha of land) who comprise about 86% of the country's total farmers have largely been left behind.

Impacts of subsidies on environment:

- **Depletion of groundwater resources:** High power subsidy has resulted in water intensive crops like paddy being grown in the water stressed regions of Punjab, Haryana. In Punjab, groundwater extraction is 165% of the naturally-available recharge.
- **Degradation of soil:** Subsidized urea has led to massive overuse of nitrogeneous fertilizers. Eample- N:P:K ratio in Punjab and Haryana is 25:5:1 going against the ideal ratio. This has damaged the soil and caused pollution to local water bodies through run-off.
- **Skewed cropping pattern:** Intense cultivation of paddy Punjab because of high level of MSP. This goes against the agro-climatic conditions of the region.

It is clear that the subsidy regime is not a panacea for the Indian agriculture as it does not necessarily increase the productivity and the farm income. It also makes agriculture unsustainable. More productive steps like incentives for crop diversification, higher investments in agriculture infrastructure, predictable trade policies, freeing up markets, etc. should be taken to make agriculture productive and profitable.

Practice Question

Q. Critically examine the need for reforming farm subsidy policies to ensure their effectiveness, sustainability, and alignment with broader agricultural objectives. Suggest alternative approaches to support farmers that promote long-term resilience and inclusivity in the agricultural sector.

PYQ:

Q. In what way could replacement of price subsidy with direct benefit transfer change the scenario of subsidies in India? (2015)

9. FISHERIES SECTOR

Context: As per ICAR- CMFRI research, carbon emission from India's marine fisheries sector is much lower than the global level.

Current Status of India's fisheries sector:

- Fisheries sector is one of the 'Sunrise Sectors' of the economy due to its high growth rates in the last few years.
- The sector contributes over **1% to the country's GDP** and records over **6% share of the agricultural GDP**, making it is one of the game changers in income and employment generation in the country.
- India has become the **3rd largest fish producer**, and the **4th largest exporter of fish and fisheries products** taking Brand India from **'Local to Global'**.

Significance of fisheries sector:

- **Large resource base:** India's more than 7500 km long coastline, vast freshwater resources, extensive Exclusive Economic Zone (EEZ) and sizable continental shelf region makes it the third largest fish producing country in the world accounting for 8% of global production.

- **Huge export potential:** Currently India is the 4th largest exporter of fish and fisheries products and total export is targeted to reach $14 bn by 2025. Thus, the sector is crucial to realize the full potential of agri-exports which currently stands at **$50bn in FY 2021-22.**
- **Link with the subsidiary sectors:** The sector stimulates growth of a number of subsidiary industries including the food processing sector. **Example** canned tuna, cod liver oil etc. are in high demand.
- **Support to marginalized communities:** The sector has been instrumental in sustaining the livelihoods of over **28 million people** in India especially for marginalized and vulnerable communities especially in the coastal areas. Many more are employed along the value chain.
- **Mitigation of hunger and nutrition deficiency:** Fish being an affordable and rich source of animal protein is one of the healthiest options to **mitigate hunger and nutrient deficiency** thereby contributing in the fulfilment of the Sustainable Development Goals (SDGs). The Government has been taking multi-pronged approaches to maximise the potential of 'Fish for Health and Fish for Wealth'.
- **Exports:** The fish production reached an **all-time high of 16.25 MMT during FY 2021-22 with marine exports touching Rs. 57,586 Crores**. India has emerged as a fish surplus country and has increased its exports of fish and fish products steadily in recent years. Diverse aqua products are exported from India to several countries across the globe.

Issues plaguing the fisheries sector:

- **Overfishing:** lead to declines in fish populations and can have ripple effects throughout the ecosystem. Overfishing can also lead to economic losses for fishing communities and can even lead to a collapse of entire fish stocks.
- **Bycatch:** It is unintended capture of non-target species when fishing for a certain species. This is a significant problem facing the fishing industry today, with estimates indicating that **40% of the total global catch is bycatch**. This is a significant wastage of resources and can also lead to the deaths of many marine animals, including endangered species.
- **Illegal, unreported and unregulated fishing (IUU):** IUU fishing can lead to overfishing, bycatch, and habitat degradation, which can have a negative impact on the population of specific species and the ecosystem balance. Additionally, it undermines the livelihoods of legitimate fishermen, as it reduces the number of target species available for harvest and sale.
- **Bottom Trawling:** It involves dragging a large net along the bottom of the ocean floor, which can cause significant damage to marine habitats. The practice stirs up large amounts of sediment, damaging coral species which provides shelter to deep-sea dwelling species.
- **Others:** Other destructive practices include **blast fishing** and **cyanide fishing** which are also illegal in many places but still continue to be used. These practices cause destruction to the underlying habitats disturbing the whole aquatic ecosystem.

Government measures to promote fisheries sector and achieve the goals of Blue Revolution:

- **Pradhan Mantri Matsya Sampada Yojana (PMMSY):** It is the flagship scheme of the government for the sector. It is a holistic scheme focusing inland and marine fisheries, infrastructure, farmers' welfare, skill development etc.
  - PMMSY has supported 31.89 lakh farmers from 22 states and seven UTs under insurance coverage and an additional 6.77 lakh farmers have been covered for livelihood and nutritional support during the lean/ban period.
- **Independent Ministry:** Recognising the importance of the fisheries sector, the Department of Fisheries was created in February 2019 to provide sustained and focused attention to the development of the sector. This was followed by the creation of an independent Ministry of Fisheries, Animal Husbandry and Dairying in June 2019.
- **Fisheries and Aquaculture Infrastructure Development Fund (FIDF):** It is a dedicated fund provides concessional finance to the Eligible Entities (EEs).
- **Concessional credit under Kisan Credit Card:** To deepen the financial inclusion in this sector, the Government of India introduced insurance coverage for fishing vessels for the first time in fisheries and also extended Kisan Credit Card (KCC) facility to fishers and fish farmers to help them meet their working capital and short-term credit needs. It was a part of **Atmanirbhar Bharat Package.**
- Other than these schemes, the government has also taken steps addressing critical gaps in the value chain through technology infusion.

Importance of fisheries sector in **SDG 2**, related to food and nutrition security of the nation as well as sustainable growth of agriculture can't be overestimated. The sector will play an essential role in achieving the **$5tn economy status by 2025** and mitigating the impact of climate change in farming. Promoting inland fisheries, adequate and timely information to farmers, investment in modern and effective fishing methods and cold chain infrastructure etc. will be crucial to sustain the Blue Revolution in the coming years.

Practice Question

Q. Analyze the significance of the fisheries sector in India's economy and its potential for sustainable development.

10. FARMERS DISTRESS INDEX

Context At the **Central Research Institute for Dryland Agriculture (CRIDA), an Indian Council of Agricultural Research (ICAR) organ,** the scientists have developed an early warning system called the 'Farmers Distress Index'.

What is Farmer distress Index?

- The Index has been built on the 21-simple questions, divided into seven blocks of three questions each.
- The Index will track, identify and support the real needy and distressed farmers.
- It will measure the level of distress, by which the government and the financial institutions can decide on an appropriate package of support instead of the current practice of doling out distress package to all the farmers across the board.
- This index won't be uniform across the country as it changes from place to pace depending on the stress levels.
- It will also help the entire financial sector, government departments and insurance companies.

The Development of this index is part of the **NABARD-funded project on 'Farmers Distress and Pradhan Mantri Fasal Bima Yojna (PMFBY)'.**

Why Indian farmers are stressed?

- Increased shortage of fertilizers
- Fragmented land holding
- depleting water table
- deteriorating soil quality
- increasing input costs
- low productivity
- forced to borrow
- Limitations of loan waiver schemes to benefit 'very high' and 'high' distress farmers.
- Growing instances of Farmers' suicides

Significance of teh Index

- Use of weather data derived from remote sensing technology, automatic weather stations, mobile telephony and artificial intelligence can help in identifying the distressed villages.
- The index can be used by the policy makers and the government to plan and design a timely and targeted method of supporting distressed farmers.

Practice Question

Q. Examine the causes and consequences of agricultural distress in India. Discuss the role of agrarian movements, cooperative farming models, and diversification strategies in mitigating agricultural distress.

PYQ

Q. Normally countries shift from agriculture to industry and then later to services, but India shifted directly from agriculture to services. What are the reasons for huge growth of devices vis-à-vis the industry in the country? Can India become a developed country without a strong industrial base? (2014)

11. ROLE OF TECHNOLOGY IN AGRICULTURE

Agriculture in India is faced with several challenges (climate change, low productivity, low water use efficiency, and low profitability) and is in dire need of paradigm shift due to increasing pressure of population accompanied with rising food demand. In this challenging scenario, technology can play a vital role in transforming the agriculture from subsistence based, non-remunerative activity to a modern enterprise.

Important roles played by technology

- **Monitoring and controlling crop management system via smartphone:** Farm data like yield mapping, soil sampling, moisture, intelligent software analysis for pest and disease prediction etc. can be done.
- **Automation: Example:** Automated irrigation, light and heat control, application of fertilizers in quick and efficient manner, removing weeds, harvesting of crops etc. Robots can address the issue of labor shortages as well.
- **Management of spatial data:** Geographic Information System (GIS) can be used to manage and analyze spatial data relating crop productivity and agronomic factors. It can integrate all types of information and interface with other decision support tools.
- **Quick information sharing:** Information related to weather, market signals etc. can be shared with the farmers quickly regardless of the location.
- **Development of resistant varieties:** Through use of biotechnology, disease and pest resistant varieties can be developed.
- **Promotion of climate smart agriculture**: Technology can help mitigate the devastating effects of climate change while producing food and energy in a sustainable manner.

Smart Farming

Smart farming is about using the new technologies which have arisen at the dawn of the **Fourth Industrial Revolution** in the areas of agriculture and cattle production to increase production quantity and quality, by making maximum use of resources and minimising the environmental impact. Also, the implementation of technology in agriculture and cattle production will make it possible to boost food security throughout the world.

Benefits of smart farming

The application of the above technologies has a positive impact on agriculture and cattle farming. Let's take a look at some of these improvements:

Major Technologies

- **Drones:** Drones simplify supervision tasks for farms by being able to cover hundreds of acres in one flight, gathering, with infrared technology, multispectral images and a wide variety of information about the condition of the land, irrigation needs, crop growth, the existence of pathogens, and, in the case of cattle, the number of animals, their weight and possible anomalies such as lameness or unusual movements.
- **IoT:** The Internet of Things makes it possible to optimise the monitoring of farms, mainly through smart sensors capable of measuring everything from solar radiation to leaf moisture and stem diameter, or the temperature of each animal in the case of livestock, making it easier to make all sorts of management decisions.
- **Big data:** By analysing massive amounts of data, farmers can manage all the information obtained from drones, the Internet of Things and other measuring instruments and integrate it both with historical information for the farm and with weather data, in order to optimise all stages of the production process.
- **Blockchain:** Blockchain makes it possible to monitor crops and cattle from growth until handover to suppliers, improving, for example, the traceability of the supply chain. By using this technology, if an imported vegetable poisons consumers the source of the outbreak can be easily traced and only the affected products withdrawn, instead of prohibiting imports of vegetables from the entire country of origin.
- **Artificial intelligence:** In agriculture, artificial intelligence and robotisation are used mainly to interpret field images and apply fertilisers and pesticides with surgical precision, or for dealing with weeds. On a farm, for instance, it means that microphones can be used to identify squealing piglets that are being squashed by their mother, and a vibration can be sent to her through a sensor to make her get up.

- **Increased production:** The optimisation of all the processes related to agriculture and livestock-rearing increases production rates.
- **Water saving:** Weather forecasts and sensors that measure soil moisture mean watering only when necessary and for the right length of time.
- **Better quality:** Analysis of the quality of the produce obtained in relation to the strategies applied makes adjustments possible to increase subsequent production quality.
- **Reduced costs:** Automation of sowing, treatments and harvesting in the case of agriculture reduces the use of resources.
- **Pest detection and animal health:** Early detection of infestations in crops or sickness in animals means that their impact on production can be minimised and animal welfare improved.
- **Better sustainability:** Saving resources like irrigation water and getting maximum benefit from the land reduce the impact on the environment.

Initiatives by the government to promote smart farming:

- **Digital Agriculture Mission (DAM):** It includes India Digital Ecosystem of Agriculture (IDEA), Farmers Database, Unified Farmers Service Interface (UFSI), Funding to the States on the new Technology (NeGPA), Soil Health, Fertility and profile mapping etc.
- **Per Drop More Crop component of the Pradhan Mantri Krishi Sichai Yojana (PMKSY-PDMC): It** aims to increase water use efficiency at the farm level through micro irrigation technologies, i.e., drip and sprinkler irrigation systems.
- **Crop yield prediction model using artificial intelligence (AI):** NITI Aayog partnered with IBM for developing a crop yield prediction model using AI. This helps in providing real-time advisory to farmers.
- **Sensor-based Smart Agriculture (SENSAGRI):** It involves drones for monitoring soil and crop health. In this project, drones would be used for smooth scouting over land fields, for collecting precious information and transferring the data to farmers on a real-time basis.
- **Other steps:** Financial support to Agri-tech startups and promoting the adoption of AI to transform agricultural and farming trends.

Technology and smart practices can help mitigate risks caused by climate change, among others. India is constantly making efforts to formulate and implement policies to make agriculture more sustainable. AI has the potential to completely revolutionise the existing trends in agriculture and farming. Given India's vibrant corporate structure, partnerships between the corporates and the government can help create a smart agriculture industry.

Practice Question

Q. Discuss the transformative role of technology in the agricultural sector. Evaluate the impact of technological advancements in enhancing productivity, resource efficiency, and sustainability in farming practices.

12. LAND RECORDS

Syllabus Map: - Land reforms in India (Topic-Role of digitalization in agriculture).

Context: In recent years, India has taken proactive steps to digitize land records under the **Digital India Land Records Modernisation Programme (DILRMP)** to create an integrated land management system.

Background:

Secure property rights and efficient land registration institutions are a cornerstone of any modern economy. They give confidence to farmers and individuals to invest in land, allow farmers to borrow – using land as a collateral-to attain decent livelihood opportunities, to expand job opportunities. Without land tenure systems that work, economies risk missing the foundation for sustainable growth, threatening the livelihoods of the poor and vulnerable the most. In order to address the discrepancy in land records the government at both central and state levels is giving a major push to digitalization of land records.

Significance of accurate land records:

- **High litigation:** A World Bank study states that some estimates suggest that land-related disputes account for two-thirds of all pending court cases in the country. A **NITI Aayog paper** suggests that land disputes on average take about 20 years to be resolved.

- **Access to credit:** Accurate land records provide legal proof of ownership, which is required for obtaining credit from banks and other financial institutions. Without proper land records, farmers may find it difficult to secure loans, which can limit their ability to invest in their land and improve their agricultural practices.
- **Government schemes:** The government of India offers various schemes and subsidies for farmers to invest in their land and improve their agricultural practices. Accurate land records are often required to access these schemes, as they provide proof of ownership and help to prevent fraud.
- **Planning and development:** Accurate land records are crucial for planning and developing infrastructure such as roads, water supply systems, and other public amenities. This information is used to identify areas where development is needed, as well as for determining land acquisition and compensation rates.
- **Land transactions:** Accurate land records are essential for carrying out land transactions such as buying, selling, or leasing land. In the absence of proper records, disputes over land ownership can arise, which can lead to legal and financial complications.
- **Land consolidation:** Land consolidation involves combining small and fragmented land holdings into larger and more productive farms. Accurate land records are essential for identifying potential areas for consolidation, as well as for ensuring that the process is carried out in a fair and transparent manner.

Digital India Land Record Modernisation Programme (DILRMP):

- It is a Central Sector scheme that has been extended to 2023-24, to complete its original targets as well as expand its ambit with a slew of new schemes.
- In 2008, two schemes viz, **Computerisation of Land Records (CLR)** and **Strengthening of Revenue Administration and Updating of Land Records (SRA&ULR)** were merged into a modified scheme named DILRMP.
- It is implemented by the **Department of Land Resources under the Ministry of Rural Development.**
- The DILRMP has 3 major components –
  - Computerization of land record
  - Survey/re-survey
  - Computerization of Registration

Scope and relevance of block chain technology for digitization of land records in India:

Blockchain technology is a peer-to-peer protocol that can be leveraged to keep track of transactions over the internet. It has the potential to revolutionize the digitization of land records in India.

Significance of blockchain technology for digitalization of land records:

- **Decentralization:** Blockchain technology operates on a decentralized network, which means that the data is not controlled by a single entity or authority. This can help to eliminate the risk of fraud or corruption in the management of land records.
- **Secure land registries:** India: In 2018, the Uttar Pradesh government announced plans to introduce the block chain-based record-keeping system to secure the land registries and revenue records. A major reason is that 67 percent of the total 220 million people in the State are dependable upon the land to earn a living.
- **Transparency:** The use of blockchain technology can bring transparency in the management of land records. It can provide access to all relevant parties, including landowners, government officials, and banks, to the same set of data. This can help to reduce disputes and increase trust among stakeholders.
- **Efficiency:** Digitizing land records using blockchain technology can reduce the time and cost associated with manual record-keeping. It can also enable faster and more accurate land transactions and promote greater economic activity.
- **Reduction in fraud:** On a national scale, the Union Government, policy think tank NITI AAYOG has been working on building the country's largest blockchain network (India Chain) aiming to reduce fraud and building transparency in the system. India Chain will be linked to India Stack, a set of code developed around India's unique identity project Aadhar.

By **March 2024, India aims to digitise 100 per cent** of its land records and the land registration process. The use of blockchain technology in digitizing land records in India can help to bring transparency, security, and efficiency to the management of land records. It can eliminate fraud and corruption, reduce disputes, and promote economic activity. The use of smart contracts can also make land transactions more secure and efficient.

Practice Question

Q. What are the challenges faced in maintaining accurate and updated land records in India? Examine the significance of efficient land records management in promoting land governance and inclusive development.

PYQ:

Q. How did land reforms in some parts of the country help to improve the socio-economic conditions of marginal and small farmers? (2021)

Q. The right to fair compensation and transparency land acquisition, rehabilitation and resettlement act, 2013 has come into effect from 1 Jan 2014. What implications would it have on industrialization and agriculture in India? (2014)

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3

GOVERNMENT BUDGETING

1. ROLE OF ECONOMIC BUDGET FOR ECONOMIC GROWTH AND MINIMIZING REGIONAL DISPARITIES

Context: As per the finance ministry, the measures introduced in budget 2023-2024 (e.g.-increase in capex, boosting the green economy, and initiatives for strengthening the financial markets) are expected to promote job creation and spur economic growth.

Background:

- The budget is an expression of government's public policy which informs the public as to how the government plans to buy and sell and primarily reflect the government's balance sheet.
- In accordance to the Constitution of India's **Article 112**, the government to presents a budget at the Parliament before the beginning of every financial year.
- The Union Budget is allotted for the upcoming fiscal year, which starts from **1st of April and ends on 31st March** of the next year.

Significance of government budget:

- **Economic Growth:** The budget is an avenue to ensure the country's economic growth. The government makes provisions to increase budgetary spending and promote savings. It aims to accelerate the country's economic growth. The government calibrates its budgetary policy depending on economic conditions.
- **Reduces wealth and income disparities:** The budget aids in influencing the distribution of income through subsidies and taxes. It helps to ensure that a high rate of tax is levied on the rich class, thereby reducing their disposable income. On the other hand, a lower rate of tax is charged on the lower income group to ensure they have sufficient income in hand.
- **Ensures efficient allocation of resources:** It is necessary to employ the available resources in the best interest of the country. Allocating resources optimally helps to achieve profit maximization for the government so as to foster public welfare.
- **Avoids excessive spending:** Planning a balanced budget helps governments to avoid excessive spending and allows them to focus funds on areas and services that require them the most. Furthermore, achieving a budget surplus can provide funds for emergencies, e.g., if the government wishes to increase spending during a recession without having to borrow.

The government budget has helped economic growth in following ways:

- **Increased investment in infrastructure:** The government has increased its spending on infrastructure which has not only created employment opportunities but has also led to increased economic activity and productivity.
- **Investment in human capital:** The government has also increased its spending on poverty alleviation, education, healthcare, and skill development, which has improved the quality of the workforce and contributed to higher productivity and economic growth.

- **Promoting entrepreneurship and innovation:** The schemes such as **Start Up India, stand up India,** etc. has led to the creation of new businesses and employment opportunities, contributing to economic growth.
- **Fostering foreign investment:** This has attracted foreign investors and contributed to the growth of various sectors of the economy.
- How Budget reduces regional disparity?

The government budget has helped in reducing regional disparity in following ways:

- **Infrastructure:** The government has increased its spending on infrastructure development in less-developed regions, such as the Northeast, Jammu and Kashmir, and Bihar, among others.
- **Rural development:** The government has implemented several schemes, such as the Pradhan Mantri Gram Sadak Yojana, the Mahatma Gandhi National Rural Employment Guarantee Act, and the National Rural Livelihood Mission, etc. This has contributed to reducing regional disparities and improving living standards in rural areas.
- **Special category status:** The government has granted special category status to some states, such as the Northeastern states, Jammu and Kashmir, and Himachal Pradesh, among others. This has led to increased investment in these regions, contributing to their development and reducing regional disparities.
- **Incentives for industry:** The government has provided incentives and subsidies to promote industry in less-developed regions, such as tax breaks, lower interest rates, and land acquisition assistance, among others.

Economic disparity and inequality is an imminent threat to any country's economy. The government needs to address these kinds of threats by introducing public and economic welfare policies for the underprivileged sections of the society through the budget. Although a lot has been done to bring India at par with other developed countries but the government needs to work on above mentioned challenges and increase its spending on sectors such as education and health that have lasting impact on the economy.

Practice Question

Q. Evaluate the role of budgetary policies in addressing regional disparities, including infrastructure development, skill enhancement, and resource allocation for marginalized regions. Give examples.

PYQ:

Q. Distinguish between capital budget and revenue budget. Explain the components of both these budgets. (2021)

Q. One of the intended objectives of union budget 2017-2018 is to transform, energize and clean India. Analyze the measures proposed in the budget 2017-2018 to achieve the objective. (2017)

Q. Women empowerment in India needs gender budgeting. What are the requirements and status of gender budgeting in Indian context? (2016)

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4

EMPLOYMENT

1. LABOR LAWS AND ASSOCIATED CHALLENGES

Context: The Indian government has introduced new labour codes, which are expected to simplify labour laws, provide greater flexibility for companies to manage their workforce, and offer better protection and benefits for workers.

About Labor laws:

Labour laws, also known as employment laws, are the body of laws, administrative rulings, and precedents that address the legal rights and restrictions of working people and their organisations. Labour laws attempt to regulate the relationships between an **employer or group of employers and their employees.** In 2020, the Central Government has promulgated around 44 labour-related statutes, 29 of which have been consolidated into four new labour codes.

1. Code on Wages, 2019:

- Applying to all the employees in organized as well as unorganized sectors.
- Under these new codes, a number of aspects related to employment and work culture, in general, might change including the take-home salary of employees, working hours, and the number of weekdays.
- According to this wage code, once an employee quits, is fired, or is removed from employment and services, a company is required to pay the full and final settlement of their salaries within two days after their last working day.
- Currently, firms require anywhere from 15 to 60 days, and in some situations up to 90 days, to pay the full settlement of wages.

2. Code on Industrial Relations, 2020:

- Employees in India may be able to enjoy a four-day workweek, as opposed to the current five-day workweek.
- In that case, however, employees will have to work for 12 hours on those four days since the labour ministry has made it clear that even if the proposal comes through, the 48-hour weekly work requirement has to be met.

3. Code on Social Security, 2020:

- The regulations restrict allowances to 50 percent.
- This implies that half of the salary would be basic wages and contribution to the provident fund is calculated as a percentage of basic wages that involves the basic pay and **dearness allowance (DA).**
- Under the current labour regulations, the employer's percentage-based contribution towards the PF balance depends on the employee's basic pay and dearness allowance.

4. The Occupational Safety, Health and Working Conditions Code, 2020:

- Bill provides that women will be entitled to be employed in all establishments for all types of work under the Bill.

- It also provides that in case they are required to work in hazardous or dangerous operations, the government may require the employer to provide adequate safeguards prior to their employment.

Emerging issues related to labour laws in India:

- **Informalization of labor:** A significant trend in India's labor market is the increasing informalization of labor. More than 90 percent of the total workforce has been engaged in the informal economy. In the informal sector, workers do not have access to social security benefits such as health insurance and retirement savings.
- **Gender pay gap:** Despite several laws aimed at promoting gender equality in the workplace, the gender pay gap in India remains significant. Women continue to earn less than men for the same work, and there is a need to address this issue through better implementation of existing laws and policies. According to World Inequality Report 2022, men in India capture 82% of labour income, while women earn just 18%.
- **Digitalization of work:** With the growth of the gig economy and remote work, there is a need to adapt labor laws to the new realities of digital work. There is also a need to address issues such as job insecurity, low pay, and lack of benefits for workers in the gig economy.
- **Changes in labour laws:** In 2020, the Indian government introduced significant changes to the country's labour laws, aimed at simplifying and rationalizing them. These changes have been criticized by some experts and labor unions, who argue that they may lead to the erosion of workers's rights and job security.
- **Social security for workers:** Many workers in India, especially those in the informal sector, do not have proper access to social security benefits such as health insurance, pension, and disability benefits. There is a need to extend these benefits to all workers, including those in the informal sector, to provide them with a safety net.

Implications of new labor reforms:

- **Boost to local economy:** Reverse migration of labour from industrialized states back to their homelands is expected to create a glut of labour. Relaxing labour laws is expected to encourage local industry to hire more. Thus, the reforms make rural economy an attractive place for investment while channelizing the government move of Vocal for Local.
- **Ease of doing business:** The recent labor law reforms are aimed at simplifying and rationalizing the existing labor laws in India, making it easier for businesses to operate in the country.
- **Increased flexibility:** The recent labor law reforms have introduced more flexibility in labor laws, allowing businesses to hire workers on a contract basis and make changes to the terms of employment. This increased flexibility is expected to attract foreign capital, as businesses will have more options to structure their operations in a way that suits their needs.
- **Promoting formalization of labor:** The labor law reforms are also aimed at promoting formalization of labor in the country. The informal sector in India is a significant contributor to employment, but it is largely unregulated, leading to issues such as low pay and job insecurity. Formalizing the labor sector is expected to attract foreign capital, as it will provide a more stable and predictable environment for businesses to operate in.
- **Relieve from cumbersome regulatory compliances:** The recent reforms will relieve the whole system from cumbersome regulatory compliances as the complex India's labour laws rarely serve the purpose of protecting workers, but rather act as an instrument to harass businesses. The consolidation of these reforms will simplify the whole process which in turn will ease the regulatory mechanism and redressal making India and attractive foreign capital destination.
- **Reducing litigation:** The labor law reforms are aimed at reducing litigation related to labor laws, which has been a significant challenge for businesses operating in India. The reduction in litigation is expected to provide a more predictable and stable environment for businesses, making it more attractive for foreign capital to invest in the country.

Thus, the recent labor law reforms in India are expected to facilitate employment growth and attract foreign capital by making it easier for businesses to operate in the country, providing more flexibility, promoting formalization of labor, strengthening compliance, and reducing litigation. However, it remains to be seen how effectively these reforms will be implemented and how they will impact the overall labor market in India.

Practice Question

Q. Analyze the challenges faced in implementing and enforcing labor laws in India, including issues of informal employment, labor exploitation, and the informal sector's inclusion.

2. GIG WORKERS

Context: According to Skill, labour, talent for MSMEs, the demand for skilled gig workers earning over Rs 1.5 lakh per month has increased by 21.38 per cent in the past six months, indicating higher demand for skilled gig workers.

Who is a gig worker?

- According to **Code on Social Security, 2020** Gig worker is a person who performs work or participates in a work arrangement and earns from such activities outside of traditional employer employee relationship.
- **Relevance in Indian Context:** India has already emerged as one of the world's largest countries of Gig workforce due to rising factors like urbanization, access to internet, digital technologies and smartphones in India, start-up culture, freelancing platforms, etc. the plight of COVID-19 pandemic coupled with inflation has accelerated the prospects of gig economy.

Why gig economy is important for India?

For workers	For companies	For economy
• Enjoy flexible hours • Choice of work • Ability to enhance income by doing multiple gigs.	• Avoiding cost of social security and fixed remuneration • Save overhead costs on office space and equipment • Give them greater recruitment flexibility. • Provide more options to recruit gig talent given the opportunities it affords in the current market scenario.	• As per a BCG report, the gig economy has the potential to serve up to 90 million jobs, add up to 1.25% to India's GDP. • Enable India to harness demographic dividend, which is estimated to be around 65%, and average age of India is 28 years.

NITI Aayog report findings on Gig economy:

- **Workforce count:** In 2020–21, 77 lakh workers (1.5% of total workforce) was engaged in the gig economy. It is expected to reach 2.35 crore workers (4.1% of the total workforce) in India by 2029–30.
- **Skill set of workforce engaged in the gig economy:** Presently, about 47% of the gig work is in medium skilled jobs, about 22% in high skilled and about 31% in low skilled jobs.
- **Skill Polarisation:** The report draws attention to skill polarisation as the trend shows gradual decline in concentration of workers in medium skills while that of the low skilled and high skilled is increasing.

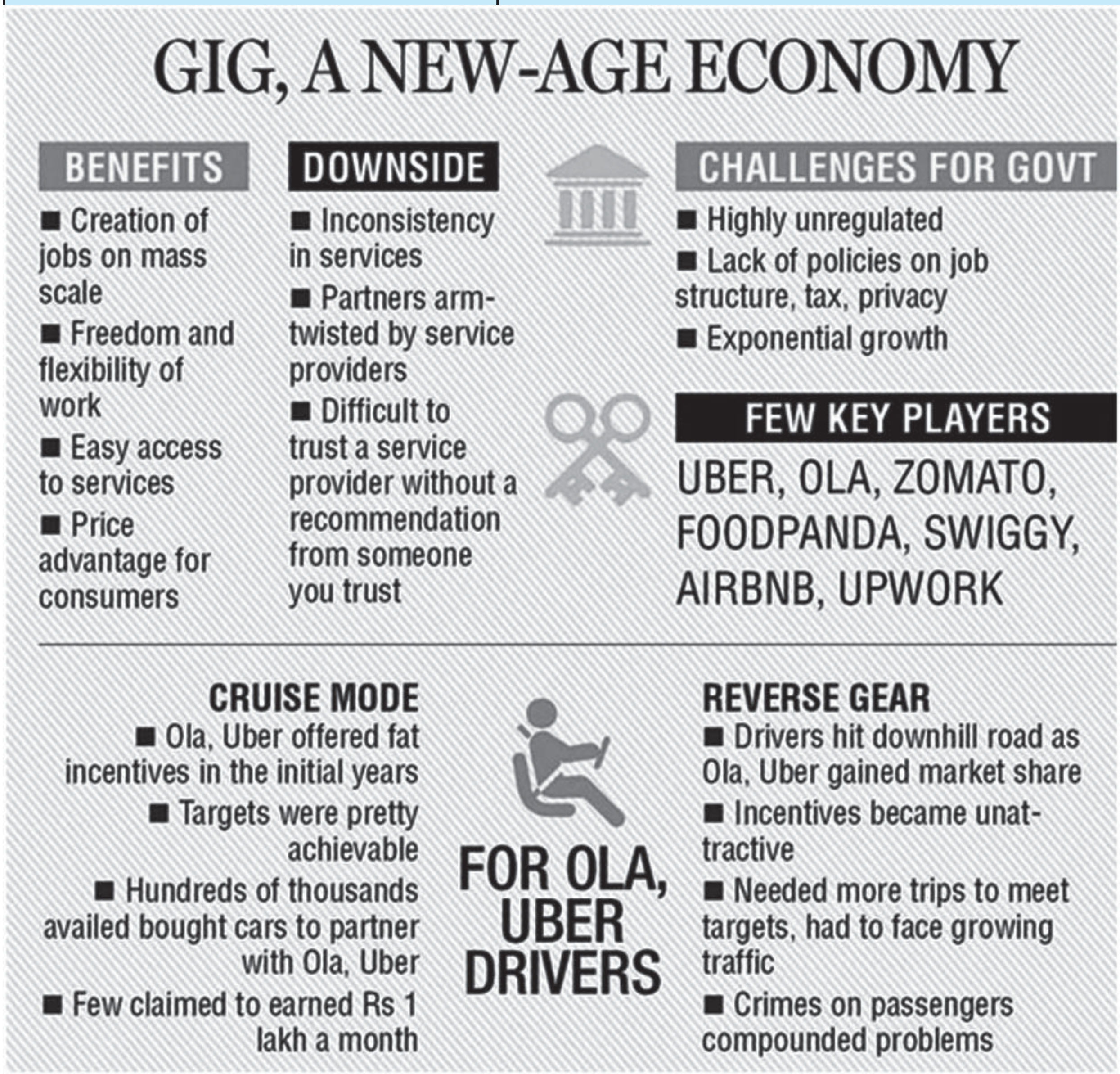
Rajasthan state is planning to enact a social security law for "gig workers". It will make it the first of its kind in the world.

Analysis

Advantages of gig economy for companies:	Disadvantages of gig economy for workers:
• Flexibility • Cater to immediate demand • Cheaper and more efficient • Wider choice for employers	• Erosion of traditional economic relationships • Discourage Investment in Human Resources • Crowding out traditional workers • Disrupted work-life balance for gig workers

- Offers specific expertise
- Wider choice for employees
- Youth economic productivity
- Advantages for women
  - Balancing Home and Work
  - Safe Work Environment for Women
  - Addressing Migration issue
  - On-Demand Work
  - Earning Extra Income

- No employment-related rights
- High risk, no safety net
- Disadvantages for women
  - Gender segregation of work
  - Wage Disparities
  - Digital Divide
  - **Dual burden:** On-demand work schedules do not allow women to reap the benefits of peak hours due to additional domestic and childcare responsibilities



Suggestive measures to streamline gig economy (Source: NITI Aayog):

- **Catalyse Platformization:** A Platform India initiative, built on the pillars of Accelerating Platformization by Simplification and Handholding, Funding Support and Incentives, Skill Development, and Social Financial Inclusion, like the immensely successful Startup India initiative, should be introduced.
- **Accelerate Financial Inclusion:** Access to institutional credit may be enhanced to bolster the Government's existing efforts to promote financial inclusion through financial products specifically designed for platform workers and those interested to set-up their own platforms.
  - FinTech and platform businesses may be leveraged to provide cash flow-based loans to workers as against collateral-based loans, thereby catering to the needs of those new to credit.

- **Skill Development for Platform Jobs:** Pursue ends- or outcome-based, platform-led models of skilling and job creation development of youth and the workforce to make them employable.
  - Integrate employment and skill development portals such as E-shram and National Career Services Portals or Udyam portal with ASEEM portal.
- **Platform-led Transformational Skilling:** Platforms can enable the upskilling and diversification of platform workforce in a newly structured and industry tested manner. Platforms can collaborate with the Ministry of Skill Development and Entrepreneurship, and the **National Skill Development Corporation (NSDC)** to nurture skilled workers and micro-entrepreneurship.
- **Gender Sensitisation & Accessibility Awareness Programmes**: Platform businesses can undertake partnerships with civil society organisations (CSOs) and non-governmental organisations (NGOs) to promote legal/ economic/ social rights of women and especially from marginal and vulnerable backgrounds, thereby increasing their potential to take up non-traditional livelihoods.

RAISE Framework for operationalising the Code on Social Security (CoSS), 2020

As Central and State governments draw up rules and regulations under CoSS 2020, they could adopt the five-pronged RAISE approach to ensure realisation of full access to social security for all gig and platform workers:

- **R**ecognise the varied nature of platform work to design equitable schemes.
- **A**llow augmentation of social security through innovative financing mechanisms.
- **I**ncorporate, while designing schemes, the specific interests of platforms, factoring the impact on job creation, platform businesses and workers.
- **S**upport workers to subscribe to government schemes and welfare programmes through widespread awareness campaigns.
- **E**nsure benefits are readily accessible to workers.

The rise of the gig economy in India is changing the face of its workforce. The current estimation for gig economy jobs in India is at 8 to 18 million, which is projected to increase to over 90 million jobs in the non-farm sector in the next eight to ten years. Therefore, by next decade the gig economy in India can see USD 250 billion transactions at 1.25% of the country's Gross Domestic Product.

Practice Question

Q. Discuss the regulatory gaps and legal ambiguities surrounding gig work and its impact on workers' protection and welfare.

3. CARE ECONOMY VIA UNIVERSAL BASIC INCOME

Context With the recent study by ILO, the care giving economy can be a way for boosting post COVID economy of a country.

What is care economy?

- Care giving work is broadly defined as looking after the **physical, psychological, emotional and developmental needs** of one or more other people.
- The care economy is growing as the demand for childcare and care for the elderly is increasing in all regions.
- It will thus create a great number of jobs in the coming years.

- Care giving economy will not only help in economic growth but it will also address several social issues like gender inequality and care for children and elderly in the society.

Universal Basic Income

- The 'care givers and economy' was first highlighted by the **National sample survey of India** by the report of **Family and health survey.**
- **Universal basic income-** To deal with the economic inequality, unemployment and poverty created by the Covid-19 pandemic, many advocated Universal Basic Income (UBI) programme to be a solution.

Will it benefit the Indian economy?

- Providing decent work for all to generate revenue and increase labour force participation.
- Extending social security for women and elderly-
- Gender role balancing
- Reduce burden for Informal work
- Health benefits
- Achieving the silver economy
- **Reduction in unemployment:** Unemployment rate in India reached a 45-year high of 6.1% in 2017-18, as per the recent NSS estimates. Care economy will help to reduce unemployment by giving care jobs in the sectors such as nurses, home care takers, child caring person and elderly cares.
- **Child care:** Child care services came to picture after female or mothers started participating in formal and informal jobs for helping the family income, which must be included in jobs to have gender neutral role in child care, e.g Paternity and maternity leaves

Important initiatives

- **Sage INDIA Project**- Elderly care above 50 years of age.
- **Compassionate care leave-** In Canada, Introduced to take care of one's ailing relative, up to six months in discrete or in continuum.
- **'The Swedish Theory of Love'**-Encapsulates the public policy revolution in Sweden, when policymakers decided 'autonomous individual' (not the 'household') as the unit of analysis of a public policy.

Challenges associated

- Lack of a comprehensive policy
- Poor infrastructure
- Out-of-the-pocket expenditure is increasing
- Introduction of incentives for private firms
- Lack of funds
- Subjectivity of the term 'Care' remains a major societal hurdle

Practice Question

Q. Caregiving economy promotes social welfare and gender equality. Discuss

4. WOMEN AND THEIR ROLE IN ECONOMY

Context Despite gradual gains over the decades, Indian women's economic well-being and financial independence remains a far cry, continually hindered by stubborn structural and societal barriers.

Contribution of women in economy

- Women in India represent 29 percent of the labour force, down from 35 percent in 2004.
- According to the World Bank, Indian women's participation in the formal economy is among the lowest in the world—only parts of the Arab world fare worse.
  - **Agriculture:** Even when they comprise almost 40 percent of agricultural labour, they control only 9 percent of land in India.
  - **Contribution to GDP:** It is therefore unsurprising that at 17 percent, India has a lower share of women's contribution to the GDP than the global average of 37 percent.

Challenges faced by women

- **Unpaid work:** More than half of the work done by women in India is unpaid, and almost all of it is informal and unprotected.
- **Lack of representation**: Women are not well represented in most sectors, including business leaders.
- **Lack of access to financial system:** Women are also shut out of the formal financial system. Nearly half of India's women do not have a bank or savings accounts for their own use, and 60 percent of women have no valuable assets to their name.

- **Physical insecurity:** Women in India also face great physical insecurity. The rate of crimes against women in India stands at 53.9 percent in India.

Women, Business and the Law 2022

- The World Bank's "Women, Business and the Law 2022" report, outlines the importance of women's economic empowerment and involvement in bu2siness.
- The annual study, which looks into "laws and regulations affecting women's economic opportunity," scores and ranks 190 countries in eight areas: mobility, pay, parenthood, assets, workplace, marriage, entrepreneurship, and pensions.
- According to the 2022 report, "nearly 2.4 billion women globally don't have [the] same economic rights as men."

Positive impacts on Indian Economy of women's economic empowerment

- **Impact on GDP:** Around 27% rise in India's GDP with equal participation of women, which can add up to US$700 billion to GDP by 2025.
- Social benefits
  - Women spend 90 percent of their income on their families, and economically empowered women boost demand,
  - Have healthier and better-educated children, and raise human development levels.
  - It has been reported that profits increase when efforts to empower women in emerging markets are made.

Sustainable Development Goals that can be achieved by economically empowering women:

- **SDG 1:** No poverty
- **SDG 4:** Quality Education
- **SDG 5:** Gender Equality
- **SDG 8:** Decent work and economic growth
- **SDG 10:** Reduced inequality

Initiatives by the Government

- Beti Bachao Beti Padhao Scheme
- Working Women Hostel
- Mahila E-Haat
- Mahila Police Volunteers
- STEP (Support to Training and Employment Program for Women)
- SWADHAR Greh
- Mahila Shakti Kendras (MSK)
- Self Help Group
- **India's MUDRA scheme:** The Government of India's MUDRA scheme to support micro and small enterprises and direct benefit transfers under the Jan Dhan Yojana seeks to empower women. (78% of total borrowers are women entrepreneurs)
- **One Stop Centre Scheme:** It is a centrally sponsored scheme and is funded through the Nirbhaya fund.

Practice Question

Q. Examine the significance of women's participation and contribution to the economy. Also, suggest measures to address the barriers that hold back women's economic activity.

PYQ:

Q. Women empowerment in India needs gender budgeting. What are the requirements and status of gender budgeting in Indian context? (2016)

5

BANKING SECTOR

1. BANKING SYSTEM LIQUIDITY DEFICIT

Context: For the first time since May 2019, the banking system liquidity situation turned into a deficit mode of Rs 21,873.4 crore in September 2022.

About banking system liquidity:

- In the banking system, liquidity refers to readily available cash that banks require to meet short-term business and financial needs.
- On any given day, the banking system's liquidity is said to be in deficit if it is a net borrower from the RBI under the **Liquidity Adjustment Facility (LAF),** and it is said to be in surplus if it is a net lender to the RBI.
- The LAF refers to the operations of the RBI that inject or absorb liquidity into or out of the banking system.

Reasons behind recent liquidity deficit in the banking system:

- **Demand for capital by Fintechs:** There has been a demand for capital by the Fintechs amid the festivities as the pressure has been mounting for the businesses to stock the latest trends and boost their inventory to handle the spike in consumer demand.
- **Advance tax payments:** Surplus liquidity in the banking system, as measured by absorption of excess funds by the RBI, fell sharply due to outflows on account of advance tax payments which a quarterly phenomenon is creating liquidity deficit that also increases the call money rate temporarily above the repo rate.
- **Failure to arrest rupee depreciation:** continuous attempts and interventions by RBI in the market to arrest fall of rupee against US dollar has also contributed to the liquidity crunch.
- **Slowdown in deposits:** One of the primary reasons behind the liquidity deficit is the slowdown in deposit growth. Due to the pandemic and the economic slowdown, customers are hesitant to invest in banks, which have led to a decrease in deposits. This has resulted in a decrease in the availability of funds for banks to lend.
- **Reserve Bank of India (RBI) policies:** The RBI's policies also play a role in the liquidity deficit. The central bank has been maintaining a tight monetary policy to control inflation, which has resulted in a decrease in liquidity. Additionally, the RBI's decision to increase the Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR) has also contributed to the liquidity deficit.

Effects of liquidity deficit:

- **Increase in borrowing costs:** Due to the liquidity deficit, banks have increased their borrowing costs, making loans more expensive for customers. This has resulted in higher interest rates on loans, making it more difficult for customers to access credit.
- **Delay in loan disbursement:** Due to the lack of liquidity, banks have been unable to disburse loans on time, resulting in delays for customers. This has led to frustration among customers who are in urgent need of credit.

- **Decrease in deposit rates:** Banks have decreased deposit rates to attract deposits and increase liquidity. This has resulted in lower returns for customers on their savings and investments.
- Banks will increase **their repo-linked lending rates and the marginal cost of funds- based lending rate (MCLR),** to which all loans are linked to. This rise will result in higher interest rates for consumers while reducing their borrowing capacity impacting the demand in the market.
- **T-bill rates rise:** since RBI stepped on to the path of rate hike cycle **Treasury Bill (T-Bill) rates** have started inching up. Thus, the borrowing cost for short-term papers is expected to increase at a faster pace compared to longer tenor securities.

The liquidity deficit in the Indian banking system is a result of various factors, including the slowdown in deposits, increase in credit demand, and RBI policies. Thus, it is essential for the RBI and banks to work together to address this liquidity deficit and mitigate its impact on customers.

Practice Question

Q. What do you mean by Banking system liquidity deficit? Discuss the reasons behind occurrence of this phenomenon along with its implications.

PYQ:

Q. Do you agree that the Indian economy has recently experienced V-Shaped recovery? Give reasons in support of your answer. (2021)

2. FINANCIAL SUPPORT TO DIGITAL PAYMENTS

Context: Government of India is committed to expand digital transactions in the Indian economy, and thereby enhance the quality and strength of the financial sector, as well as ease of living for citizens. The Union Cabinet recently approved the incentive scheme for promotion of **RuPay Debit Cards** and low-value **BHIM-UPI transactions (person-to-merchant)** for a period of one year from April 2022.

Background:

- In 2021-22, the government had approved an incentive scheme in compliance with the budget announcement to boost digital transactions.
  - As a result, the government says, total digital payments transactions have registered a year-on-year growth of 59%, from Rs 5,554 crore in 2020-21 to 8,840 crore in 2021-22.
- During last five years, various easy and convenient modes of digital payments, including **Bharat Interface for Money-Unified Payments Interface (BHIM-UPI), Immediate Payment Service (IMPS), and National Electronic Toll Collection (NETC)** have registered substantial growth.
  - BHIM UPI has emerged as the preferred payment mode of the citizens and has recorded 803.6 crore digital payment transactions with the value of ₽ 12.98 lakh crore in January 2023.

Different digital payment modes in India:

- **Cards, Internet Banking, Mobile Banking, Mobile Wallets**
- **Different types of online financial transactions:**
  - National Electronic Fund Transfer (NEFT)
  - Real Time Gross Settlement (RTGS)
  - Immediate Payment Service (IMPS)
- **Unstructured Supplementary Service Data (USSD):** This service allows mobile banking transactions using basic feature mobile phone (dialling *99#), there is no need to have mobile internet data facility for using USSD based mobile banking.
- **Unified Payments Interface (UPI):** It is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood.
- **Aadhaar Enabled Payment System (AEPS):** AEPS is a bank led model which allows online interoperable financial transaction at PoS (Point of Sale / Micro ATM) through the Business Correspondent or Bank Mitra of any bank using the Aadhaar authentication.

About the initiative:

- **Total financial outlay:** Rs 2,600 crore.
- Under the said scheme, acquiring banks will be provided financial incentive, for promoting **Point-of-Sale (PoS)** and e-commerce transactions using **RuPay Debit Cards** and low-value BHIM-UPI transactions (P2M) for the current financial year FY 2022-23.

- This regime has led to complaints from the Reserve Bank of India (RBI) and banks, which have been worried about the sustainability of building digital payments infrastructure in the absence of payments needed to scale and maintain them.
- The scheme will also promote **UPI Lite** and **UPI 123PAY** as economical and user-friendly digital payments solutions and enable further deepening of digital payments in the country.
- This incentive scheme will facilitate building of a robust digital payment ecosystem and promoting RuPay Debit Card and BHIM-UPI digital transactions.

Significance of the scheme:

- **Enhanced financial inclusion:** Digital payments offer anytime, anywhere access to accounts, thus making it easy for citizens to receive payments in their accounts and to also make payments using their phone.
- **Increased transparency in government system:** Earlier cash payments were subject to "leakage" (payments that do not reach the recipient in full) and "ghost" (fake) recipients. Now, benefits are directly transferred to target beneficiary (direct benefit transfer) account through digital modes of payments.
- **Instant and convenient mode of payment:** Unlike cash, money can be instantaneously transferred to the beneficiary account using digital modes like BHIM-UPI and IMPS.
- **Safe and secure:** Digital payments across India are secure as multiple levels of authentication are required for making transactions.
- **Enhanced Credit Access:** Unlike cash payments, digital payments automatically establish a user's financial footprint, thereby increasing access to formal financial services, including credit.

Challenges in digital payment systems in India:

- **Reach of Digital Penetration to end mile of customers: -** While digital payments have reached a long way, cash is the king model, still being followed by various merchants and customers. The sudden adoption is yet to be elevated and encouraged in various tier 2 & 3 cities to still enable a larger population of users to be digitally savvy.
- **Prone of fraudulent transactions & cyber-attacks: -** Digital applications are prone to cyber-attacks.
- **Rise of Transactional failures on Digital Payments: -** Bank's still run-on legacy technology. This then allows transactions which keep growing to hit a break point, post which it falls as transactional failures hits due to the large number of volumes.
- **Identity frauds and verification: -** While India hosts the largest penetration of smart phone users, it also invites a lot of users to identity duplication for various financial benefits sorted and digital payments. This provides a lot of hassle in identifying the verified users from the raw data set and in larger adoption onto whether digital payments could be a boon or bane.

How digital payments are beneficial for the economy?

- **Increased efficiency:** As digital payments lead to enhanced efficiency and speed of transactions, there is an induced cost saving that helps businesses utilize the amount saved in some other areas where it may provide great results.
- **Reduced cost:** Digital payments lower the cost and increase the security of sending, paying and receiving money.
- **Easy:** They are convenient and easy to use.
- **Accountability and transparency:** Because the payment information is recorded, digital transactions offer improved accountability and transparency. Moreover, an additional tracking availability adds to the security. Hence, overall it helps reduce corruption and theft as a result.
- **Financial inclusion:** It helps in financial inclusion and offers advanced access to a range of financial services.

This incentive scheme will facilitate building of a digital payment ecosystem and promoting RuPay Debit Card and BHIM-UPI digital transactions. The scheme will also promote UPI Lite and UPI 123PAY as economical and user-friendly digital payments solutions and enable penetration of digital payments across all sectors and segments of the population.

Practice Question

Q. Digital payments leads to transparency, efficiency, and financial inclusion. Examine

3. BAD BANKS

Context In its first year of operations, the **National Asset Reconstruction Co. Ltd (NARCL)** posted a loss of ₽5.9 crore, earning some interest from bank deposits and without any bad loans to manage.

Background

- The government, in line with the Budget 2021-22, extended a guarantee of Rs 30,600 crore to the **National Asset Reconstruction Company Ltd (NARCL)** to help clear stressed loans.
- **National Asset Reconstruction Company Limited" (NARCL)** has been incorporated under the **Companies Act,** which will be tasked to acquire stressed assets worth Rs 2 lakh crore from various commercial banks.

What is a Bad Bank?

- It is a corporate structure that takes charge of the toxic assets held by banks in a separate entity.
- It is established to buy **non-performing assets (NPAs)** from a bank and later selling them in the market,
- This relieves the commercial banks from getting rid of their stressed assets, ensuring financial stability of the bank.

Need for a Bad Bank:

- The risk of a loan converting into a **non-performing asset (NPA), impacting the financial credibility of the banks.**
- The overwhelming chunk of the NPAs is lying mostly with the public sector banks, owned by the government and hence by the public. To keep these banks running the government is sometimes forced to recapitalize them, using the taxpayer's money so that the bank can continue with the lending and funding economic activities.
- To set free the banks from these stressed assets or NPAs, the need for the creation of bad banks aroused. An entity where the stressed assets can be parked. Now the commercial banks can resume their usual business operation, especially lending and the bad bank would try to sell these assets in the market.

NPAs that banks have:

- The total bad loans in the Indian Banking system amount to Rs 8.35 lakh crore in March 2021.
- According to the World Bank data, the share of NPA to gross loans in Indian banking is significantly higher compared to developed western economies
- According to the financial stability report issued by RBI, the (CRAR) of SCBs increased from 14.7 percent in March 2020 to 16 percent in March 2021.

Concerns involved:

- Transferring of stressed asset from one government entity to another, making no economic and financial change on government's fiscal burden.
- Increased burden on government's exchequer and taxpayers' money.
- Opens up a new topic for discussion "a new form of socialism for the capitalists", where the burden of the bad investments and business decisions of the borrower is transferred to the taxpayers.

Benefits:

- Consolidation of debts, single-point decision making in Insolvency and Bankruptcy Code (IBC) 2016.
- Incentivise quicker action and resolution, and a better value realisation of the bad assets.
- Market expertise can be engaged for value enhancement.
- Banks will be able to focus on increasing business and credit growth.
- The government of India will enhance the liquidity of the Security Receipts (SRs) as it is being backed by them, also the SRs are tradable.

Practice Question

Q. Discuss the concept and potential implications of establishing "bad banks" in the banking system. Analyze the role and functions of bad banks in dealing with non-performing assets (NPAs) and toxic loans.

4. UPI IN FINANCE

Context **Unified Payments Interface (UPI)** has supercharged India's transition to non-cash payments by facilitating direct payments linked to a bank account. UPI has been a revolution for the entire economy in large part due to its rapid adoption.

How UPI is helping?

- UPI has accelerated the adoption of digital payments, and made making peer-to-peer payments easier for use cases such as bill splitting and money transfers.
- UPI has also served to become a central platform that is enabling several other associated financial services such as expense tracking, budgeting, saving, and investing.
- UPI has also increased financial awareness by offering access to various financial services and investments, making millennials and GenZs more knowledgeable about their options.
- UPI has opened up many opportunities for startups and ecommerce players to develop innovative solutions that elevate the customer experience: **Economic Survey 2022-23**

India's UPI system going global

- Bhutan and Nepal became the first to deploy India's UPI-QR code and UPI in their countries, respectively.
- Malaysia's Merchantrade Asia allowed sending remittances to India through UPI.
- India and Singapore has announced to link their payment apps, namely UPI and PayNow which will allow instantaneous and low-cost money transfers between the two countries. The tie-up will benefit the Indian economy on three major grounds:
  - Helping India becoming more integral to globalised economy
  - Supporting the fintech ecosystem
  - Better foreign remittance, and many more

Practice Question

Q. UPI has played a pivotal role in propelling India to the forefront of global digital transactions, achieving over 50% of real-time transactions in the country within just five years since its inception. Discuss

5. NEW MONETARY POLICY TOOLS IN BANKING

Context Monetary policy is the bedrock of any nation's economic policy, and everyone from part-time workers to huge financial institutions, both foreign and domestic, are impacted as it shifts.

What is monetary policy?

- RBI's monetary policy is a collection of financial tools and measures to safeguard and promote economic growth.
- According to the RBI, it conducts monetary policy with the "primary objective of maintaining price stability while keeping in mind the objective of growth."
- Monetary policy reviews are among the most effective tools of the central bank of any country to achieve financial stability and economic growth. Monetary policies basically control the overall supply of money available to commercial banks and, indirectly, to individual users and companies.

Objectives of Monetary Policy

- To promote saving and investment
- To control imports and exports
- To manage business cycles
- To regulate aggregate demand
- To generate employment
- To help with the development of infrastructure
- To manage and develop the banking sector

Monetary Policy Tools

- **Repo Rate:** Repo rate is an interest rate at which the Reserve Bank provides liquidity to commercial banks against the collateral of government and other approved securities.
- **Reverse Repo Rate:** The interest rate at which the Reserve Bank absorbs liquidity from commercial banks against the collateral of government securities.
- **Variable reverse repo:** The rate at which the RBI issues loans to commercial banks when there is a shortage of funds is the repo rate. It helps to control inflation. The reverse repo is the variable or fixed interest rate banks lend to the RBI.
- **Standing Deposit Facility:** A Standing Deposit Facility is an overnight deposit facility that allows banks to park excess liquidity (money) and earn interest. This is much more efficient than the Reverse Repo arrangement where G- secs had to be sold-and-repurchased to absorb liquidity and pay interest. No sale-repurchases.
- **Bank Rate:** The rate at which the Reserve Bank agrees to purchase or rediscount bills of exchange or other commercial papers. The Bank Rate acts as the penal rate charged on banks for shortfalls in meeting their reserve requirements such as cash reserve ratio and statutory liquidity ratio. Bank rate is closely linked with the **marginal standing facility (MSF) rate**, thus changes as and when the MSF rate changes.
- **Marginal Standing Facility (MSF) Rate:** The rate at which commercial banks borrow on an overnight basis, from the Reserve Bank of India.
- **Liquidity Adjustment Facility (LAF):** This rate refers to the Reserve Bank's operations through which it injects or sucks liquidity into or from the banking system. Apart from LAF, other instruments of liquidity management are **open market operations (OMOs)**, forex swaps and **market stabilization scheme (MSS).**
- **Cash Reserve Ratio (CRR):** CRR refers to that percentage of the bank's total deposits which it needs to maintain as liquid cash. This is a mandatory RBI requirement where the cash reserve is kept with the RBI. A bank cannot not earn interest on this liquid cash as it is maintained with the RBI and also cannot use this deposit for investing and lending purposes.
- **Statutory Liquidity Ratio (SLR):** SLR is an obligatory reserve that all the commercial banks in India are required to maintain by themselves in the form of liquid cash, gold or other securities. This is the minimum requirement that banks are expected to keep before offering credit to customers.
- **Open Market Operations (OMOs):** OMOs refers to the outright purchase and sale of government **securities, bond or Treasury Bills (T-Bills)** by the Reserve Bank either for injection or for absorption of liquidity in the banking system.

Practice Question

Q. What is the ultimate objective of monetary policy in India? What are the direct and indirect instruments that are used for implementing monetary policy?

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6

SECURITIES MARKET

1. SOVEREIGN GREEN BONDS

Why in news?

India debuts in green bond market.

About green Bonds:

The World Bank issued the **first green bond**, and created a new way to finance climate projects.

- A green bond is a **debt security** that is issued to raise money for initiatives that are relevant to the environment or the climate.
- Governments offer sovereign green bonds to raise money for these kinds of initiatives.
- The Government of India joined the **Sovereign Green Bonds Club on 25 January 2023** when the Ministry of Finance priced an INR 80 billion, for expenditures in grid scale solar and wind, decentralized solar such as solar water pumps for agriculture, green hydrogen, metro lines and afforestation.

Rational behind issuance of sovereign green bonds:

- **Hedge against climate change:** As per World Bank, green bonds offer investors a platform to engage in good practices, influencing the business strategy of bond issuers. They provide a means to hedge against climate change risks while achieving at least similar, if not better, returns on their investment.
- **Attractive to issuers:** They come with tax incentives such as **tax exemption and tax credits**, making them a more attractive investment vs. a comparable taxable bond.
- **Achieving net zero emissions:** The issuance of Sovereign Green Bonds is in consonance with India's vision to achieve **net zero emissions by 2070**, which has been carefully considered after taking into account the principles of **United Nations Framework Convention on Climate Change (UNFCCC)** in the light of national circumstances.
- **Attracting global and domestic investments:** The proceeds generated from issuance of such bonds will be deployed in public sector projects.
- **Blended finance for climate action:** Sovereign green bonds and thematic funds for blended finance in areas including climate action were announced in the **Union Budget 2022-23**. The budget pushes energy transition by encouraging domestic production of solar power equipment and batteries in line with India's climate commitments.
- **Positive environmental and climate benefits:** As per the **Securities Exchange Board of India (SEBI),** green debt securities are created to fund projects that have positive environmental and climate benefits.
- **Reduce carbon intensity:** India has pledged to achieve cumulative installed capacity of electric power from non-fossil fuel-based energy resources of about 50% by 2030 and to reduce the carbon intensity of its economy by 45% from 2005 level by that time.

Implications of sovereign green bonds for a developing country like India:

- **Encouraging private sector participation**: The issuance of sovereign green bonds can encourage private sector participation in financing environmentally sustainable projects. This can increase the availability of capital for such projects, promote the development of a green finance ecosystem, and attract more investments in the Indian domestic market.

- **Fostering innovation:** Sovereign green bonds can also foster innovation in the development of new technologies and practices that promote sustainability. This can lead to the creation of new markets and business opportunities, and contribute to the growth of the Indian domestic market in a sustainable manner.
- **Promoting international cooperation:** The issuance of sovereign green bonds can also promote international cooperation in financing sustainable development projects. This can lead to increased foreign investment in the Indian domestic market, and promote the transfer of technology and knowledge from developed to developing countries.
- **Enhancing transparency and accountability:** Sovereign green bonds can enhance transparency and accountability in the use of proceeds from such bonds. The issuance of green bonds requires the identification and tracking of the use of funds, which can improve governance and promote sustainable development.
- **Contributing to climate change mitigation**: Sovereign green bonds can also contribute to climate change mitigation by financing projects that reduce greenhouse gas emissions and promote sustainable energy sources. This can help India to meet its climate change commitments and reduce its carbon footprint, while promoting sustainable development.

Sovereign green bonds can considerably help mitigate adverse impact of climate change and lead the economy on the path of sustainable development by spurring local growth. As has been observed, India needs to buckle up to meet its several commitments and obligations. It can be achieved by providing incentives and tax benefits to retail investors to increase participation.

Practice Question

Q. Examine the concept and significance of sovereign green bonds as a financial instrument for promoting sustainable development.

PYQ:

Q. The craze for gold in Indians has led to a surge in import of gold in recent years and put pressure on the balance of payments and external value of rupee. In view of this, examine the merits of gold monetization scheme. (2015)

2. STOCK MANIPULATION, ACCOUNTING FRAUD AND CORPORATE GOVERNANCE

Context: Hindenburg, a US-based investment research firm that specialises in activist short-selling, said its two- year investigation reveals that "the Rs 17.8 trillion ($218 billion) Indian conglomerate Adani Group has engaged in a brazen stock manipulation and accounting fraud scheme over the course of decades."

Fundamentals:

Stock Manipulation: Stock market manipulation is conduct or technique used by stock market entities to fool the investors by artificially affecting the prices of securities. These entities undertake various measures to falsely increase or decrease the demand for the securities to represent them as a profitable investment even when they know securities to be fundamentally flawed. Almost all the entities indulge in market manipulation for personal gains and exit their positions when their predetermined goals are achieved.

Accounting Fraud: Accounting fraud is an intentional manipulation of financial statements to create a false appearance of corporate financial health. Furthermore, it involves an employee, accountant, or the organization itself misleading investors and shareholders. A company can falsify its financial statements by overstating its revenue, not recording expenses, and misstating assets and liabilities.

Why corporate governance is under radar?

- Corporate governance is the system of rules, practices and processes by which a firm is directed and controlled. Corporate governance essentially involves balancing the interests of a company's many stakeholders, such as shareholders, senior management executives, customers, suppliers, financiers, the government, and the community.

- Since corporate governance provides the framework for attaining a company's objectives, it encompasses practically every sphere of management, from action plans and internal controls to performance measurement and corporate disclosure.
- If the allegations are proved then the recent crisis will reflect on failure of corporate governance in the following ways:
  - Inability to provide transparency, rationalized guidance to leadership which leads to compromising interest of the shareholders, directors, management and employees.
  - Undermining the trust dynamics between the investors, community and public officials.
  - A hindrance in promotion of long-term financial viability, opportunity, and returns.
  - The repercussions may aggravate potential for financial loss, waste, risk and corruption.

Some of the corporate scam in India in recent times is as follow:

- **Satyam Scandal:** In 2009, the chairman of Satyam Computer Services, Ramalinga Raju, admitted to inflating the company's revenue and profits for several years. The scam, which involved falsifying financial statements and creating fictitious assets, was estimated to be worth around $1.5 billion.
- **Nirav Modi Scandal:** In 2018, it was revealed that Nirav Modi, a diamond jeweler, and his associates had defrauded Punjab National Bank (PNB) of around $2 billion. The scam involved the misuse of Letters of Undertaking (LoUs) to obtain credit from overseas branches of Indian banks.
- **IL&FS Scandal:** In 2018, Infrastructure Leasing & Financial Services (IL&FS), a leading infrastructure development and finance company, defaulted on several debt obligations.
- **Sahara Scandal:** In 2011, the Securities and Exchange Board of India (SEBI) accused Sahara India Parivar of raising funds from the public through illegal means.

Role of SEBI in maintaining stability of the securities market:

- Registration and granting permission to various brokers, sub-brokers and other key plays in the market Registration of various investment schemes and mutual funds.
- Identifying the fraudulent and unfair trade practices in the stock market and taking necessary actions against them
- Controlling insider trading through proper observations and imposing proper penalties for such practices.
- Investor education by conducting various awareness camps. providing training for intermediaries for enhancing knowledge and awareness
- Conducting proper research and development and publishing necessary information to all market participants.
- SEBI charges Rs. 5 lakh fine on Serene Industries for not resolving an investor complaint within the stipulated time.

Allegations of stock manipulation and accounting fraud are detrimental for India's development as it creates a state of panic among the investors. A rational corporate governance structure and prompt policies from SEBI can prove to be game changer for long term success coupled with resilience. Stock market plays an important role in the country's economic health, and to maintain safety and trust in the market SEBI was established. SEBI maintains transparency and continuous improvement in the stock market which makes it safer for investors and other intermediaries of the stock market.

Practice Question

Q. Evaluating the consequences of accounting fraud on investor trust and market stability, discuss the regulatory framework and enforcement mechanisms required to prevent and detect such fraudulent activities.

PYQ:

Q. How would the recent phenomena of protectionism and currency manipulation in world trade effect macroeconomic stability of India? (2018).

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7

INCLUSIVE GROWTH & ISSUES ARISING FROM IT

1. WIDENING ECONOMIC INEQUALITY

Context: Economic inequality in India has widened, with the richest 1 percent of the country owning 22 percent of the total national income, while the top 10 percent own 57 percent of the national income. Half of the population of our country is earning only 13.1 percent.

About economic inequality:

Economic inequality refers to the unequal distribution of income and opportunity between different groups in society. It reflects the disparities in incomes and wealth in a society. In India, the **Periodic Labor Force Survey** for the years 2017-18, 2018-19 and 2019-20 shows that the top 10% earn approximately equal to the bottom 64%. The top 10 account for one-third of the incomes earned.

Reasons why economic inequality is widening in India:

- **Low female participations:** Inequality of both income and wealth is exacerbated by one of the lowest female participations in the world which is just above 18% in 2021. According to the **World Bank, 2021** overall labor force participation rate for India is as low as 46.3.
- **Jobless Growth:** India has had strong economic growth throughout the years, but this prosperity has not led to a reduction in poverty in the nation. Since 1990, there has been an increase in income disparity between the bottom 50% of the population and the top 10%. It is clear that the services and industrial sectors were unable to produce jobs, despite the strong economic development.
- **Haphazard Transition:** The Inability of the industry and services sector to generate sufficient jobs for people migrating from agriculture is another reason for high economic inequality. Since 1990, there is a 10 percent decline in the workforce in the agriculture sector and subsequently 4 percent and 6 percent increase in industry and services sector respectively. There is not even a 1 percentage point increase in the workforce employed in the industry sector. i.e., it is a stagnant sector now which includes iron and steel, textiles, automobiles, IT, etc. are not sufficiently producing the jobs.
- **Inadequate social sector spending:**
  - **Insufficient education sector spending:** Education's percentage of overall spending has decreased over the past ten years, falling to 10.4 in 2020-2021. A family's ability to afford schooling can also push them below the poverty threshold.
  - **Healthcare as a luxury:** India's spending on public healthcare ranks among the lowest in the world. As a result, decent healthcare is a luxury only available to those who have the money to pay for it. India accounts for 17% of global maternal deaths, and 21% of deaths among children below five years.
- **Inflation:** Also a contributing factor to income inequality. Rising prices make it difficult for those on lower incomes to keep up with the cost of living, while those with higher incomes can afford to buy more goods and services without feeling the same pinch.

It is being considered that modern age technology can bridge the income gap and lead to inclusive growth while keeping up with the needs of the marginalized.

Ways in which emerging technologies can contribute to inclusive growth:

- **Transforming key sectors:** As a powerful enabler for growth, Artificial Intelligence is expected to add $967 billion to the Indian economy by 2035, and $450–500 billion to India's GDP by 2025, accounting for 10% of the country's $5 trillion GDP target. Key sectors like healthcare, banking and finance, retail and automotive will double down on AI adoption. **For example,** in healthcare, AI is already being integrated into diagnostic algorithms for screening for diseases ranging from cancer to cardiovascular disease.
- **Hyper connected India:** The launch of 5G services in India marks a defining moment for both domestic and global 5G markets. It is predicted to contribute up to 2% of India's GDP by 2030. Alongside the rise of 5G, the focus on enabling India's hinterland with over 6, 30,000 villages will gain momentum. Access to broadband connectivity can transform rural communities – youth can leverage online vocational training to get up skilled and enhance their employability, farmers can benefit from technologies to enhance yields and artisans and micro entrepreneurs can tap into larger markets in India or overseas through ecommerce and financing.
- **Industry 4.0:** Digital supply chain, Digital Assistance, etc. are some of the technologies that will aid inclusive growth and development by 2025. Emerging technology on economic development in India is beginning to allow industries to rebuild the country's economic status in a post-Covid world. Under industry 4.0 new and emerging skills will be imparted to labors to and new technologies will be opted for in order to make the economy more productive addressing the capital output ratio.
- **Skill Based:** The evolution of new technologies and industrialization is skill based. With the emerging digitalization coming in the frame, low and semi-skilled workers shall be provided with an opportunity to adopt new skill set which will in turn enhance their productivity leading to increase in income and address economic inequality.

The Indian government has long enabled the policy framework with schemes **like 'Atma Nirbhar Bharat', 'Make in India'** initiative and others specifically targeting the economic gap. India made significant strides in its digitalization journey with expansion of internet connectivity across rural and urban areas, a wealth of data generated and consumed, and an ever-increasing number of digital services. Sustained and inclusive growth truly demonstrates the purpose of technology. India's goal of doubling its GDP and having a trillion-dollar digital economy must enable growth for all in this ambitious journey.

Practice Question

Q. Discuss the potential of education, skill development, and entrepreneurship to bridge widening economic inequality and promote inclusive growth.

2. INCREASING ROLE OF MSMES

Context

- MSME manufacturing firms have been imperative to the growth of the Indian economy. These small to medium sized ventures have always contributed largely to the country's GDP, hence contributing to different aspects of its development.
- Thus, there is urgent need of exclusive emphasis on this sector to further transform the economy.

Increasing role of MSMEs in Indian Economy:

- The Indian MSME sector contributes to about 29% towards the GDP through its national and international trade.
- As per the **MSME Ministry data**, as of May 16, 2021, India has approximately 6.3 crore MSMEs (including both service and manufacturing firms).
- It is to be noted that this sector still has a lot of unexplored territories for growth.
- It won't be wrong to say that with so much of growth potential, emphasising on the development of MSME manufacturing firms can work as a long-term development tool for India.

Benefits of MSME

- Rural growth
- Inclusion of remote areas

- All-inclusive growth
- Industrialization
- Balanced regional development
- Absorb a large workforce
- Further generating new entrepreneurs
- Competition led growth
- **Employment generation:** According to the estimates of the Ministry of MSME, Government of India, the sector generates around 100 million jobs through over 46 million units situated throughout the geographical expanse of the country.
- **Different arenas:** It has a role in different areas due to benefits like low investment, flexibility in operations, low rate of imports, and a high contribution to domestic production.
- **Multiple benefits:** They are also important for the promotion of industrial development in rural areas, use of traditional or inherited skill, use of local resources, mobilization of resources and exportability of products.

Problems faced by MSME sector	Measures need to be taken
• Lack of Finance • Lack of Basic Infrastructure • Access to Market • Access to Modern Technology • Labour Laws • Access to Raw material and Other Inputs • Lack of Skill development and training • Poor tax structure	• Tax reforms • Industrial Training Institutes and management schools • Promote R&D • E-Commerce and Marketing • Time bound procedure for bankruptcy and insolvency

Recent government initiatives

- Public Procurement Policy 2012
- **FDI:** In many FDI proposals such as FDI in Retail, there is clause that 20-30% inputs shall be procured only from MSME
- Mudra Scheme
- Udyog Aadhaar Memorandum (UAM)
- A Scheme for Promotion of Innovation, Rural Industry and Entrepreneurship (ASPIRE)
- Scheme of Fund for Regeneration of Traditional Industries (SFURTI)
- Stand Up India
- Credit Linked Capital Subsidy Scheme

Practice Question

Q. Discuss the increasing role of Micro, Small, and Medium Enterprises (MSMEs) in fostering economic growth and employment generation.

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8

RESOURCE MOBILISATION

1. ENERGY POVERTY

Context: India's oil import bill soared to $119 billion in the fiscal that ended on March 31, as global energy prices exploded, following the return of demand and the Ukraine conflict.

What is energy poverty?

World Economic Forum defines energy poverty as the lack of access to sustainable modern energy services and products. To be more precise, it is not only a matter of sustainability: energy poverty can be found in all conditions where there is a lack of adequate, affordable, reliable, quality, safe and environmentally sound energy services to support development.

What has fueled energy poverty?

Supply chain disruptions that emerged in the wake of the pandemic have contributed to output disturbances and the burst of inflation globally. The reach, severity and persistence of supply chain disruptions have far surpassed previous episodes. The future path of disruptions has first-order monetary policy implications, as it influences how quickly inflation can be brought back to target and at what macroeconomic cost.

Recent disturbances in the global supply chain contributing to increase in energy poverty:

- **COVID-19:** The widespread lockdowns in 2020 planted the first seed for today's supply chain disruptions. The abrupt freeze in economic activity crimped supply and depleted inventories, forcing businesses to seek new supplier relationships and reroute supplies, while disrupting the smooth coordination of global production.
- **Rebound in global demand:** The strong rebound in global demand in 2021 ushered in the second, more severe phase of bottlenecks. The demand rotation away from services towards goods proved larger and more prolonged than anticipated, with supply often unable to cope. Critical inputs such as semiconductors became scarce, affecting the production of many downstream industries.
- **Russia-Ukraine war:** The Russia-Ukraine conflict and COVID-19 lockdowns in China have recently exacerbated issues, affecting supply in certain sectors including consumer goods, metals, food, chemicals and commodities.
- **Strains in global production networks:** The lengthening of suppliers' delivery times across advanced economies since the end of 2020 is the most evident manifestation of widespread strains in global production networks.

The stated bottlenecks in global supply chain have created a long lasting impact on price of fuel, essential commodities putting substantial population in under developed and developing countries exposed to adverse effects of energy poverty.

Impacts of energy poverty on Economy and growth:

- **Rising cost of living:** Sky rocketing inflation hits households hard by rising food costs. As per market dynamics customers will have to severely cut back on expenditure putting demand for goods and services into uncertainty.

- **Labor unrest:** the rise in the cost of living will see workers demand wage increase to counteract the impact of inflation on their pay packets. Industrial actions aggressively up the pressure on supply chains. For example: Striking truckers in South Korea disrupted supply chains in summers of 2022.
- **Amplified energy shortages (the ripple effect):** Deficient energy supply not only impacts the present state of economy but also disrupts further manufacturing practices causing inflationary pressures. Further inflation not only impacts the prices of foods and essential commodities but directly effects energy costs. **For example:** Recently, during the wake of Russia Ukraine war rising gas prices and reduced supply from Russia not only impacted Europe which in depended directly on Russia for its energy operations but also less dependent countries like Pakistan which shortened its work week to lower energy demand.
- **Geopolitical uncertainty:** energy poverty creates a dampening impact among the members of the society which gives rise to corruption, increase in crime rates. If the situation goes uncontrolled then it can lead bigger crisis giving rise to geopolitical tensions.

We all depend on energy in our everyday lives, as we need to have sufficient levels of heating, cooling and lighting in our homes to have a decent standard of living and help guarantee our health. The United Nation's **Sustainable Development Goal 7** is to **"ensure access to affordable, reliable and modern energy for all by 2030,"** including universal access to electricity and clean cooking, a greater share of renewables in the energy mix, and a doubling of the rate of improvement of energy efficiency. Achieving full access by 2030 will require connecting almost 100 million people every year.

Practice Question

Q. What do you understand by energy poverty? Discuss its socio-economic implications.

2. DIRECT BENEFIT TRANSFER

Context: India saved over **$27 bn** in key central government schemes through Direct Benefit Transfers (DBT).

Background:

Government of India launched the **Direct Benefit Transfer (DBT) Program** on **1st Jan 2013** to directly transfer the benefits to the under-privileged population covered under 34 central schemes. With DBT program, GoI aims to make payments directly into the **Aadhaar linked bank accounts** of the end beneficiaries, removing any malpractices from the existing system such as diversions and duplicate payments.

What is Direct Benefit Transfer (DBT)?

The process of directly transferring the subsidy amount and making other transfers directly into the account of beneficiaries rather than providing it to government offices is known as DBT. In this context, transfer can be defined as the payment that the government makes directly to the beneficiary without receiving any returns. Some of the examples of transfers are scholarships and subsidies.

Aim

The primary aim of Direct Benefit Transfer program is to bring **transparency and terminate pilferage** from distribution of funds sponsored by Central Government of India.

Is Adhaar mandatory?

Since Aadhaar provides unique identity and is useful in targeting the intended beneficiaries, it is preferred, and beneficiaries are encouraged but adhaar is not mandatory for DBT Schemes.

Implementation:

- DBT Mission was created in the **Planning Commission** to act as the nodal point for the implementation of the DBT programmes.
- The Mission was transferred to the Department of Expenditure in July, 2013 and continue to function till 2015.
- To give more impetus, DBT Mission and matters related thereto has been placed in Cabinet Secretariat under Secretary (Co-ordination & PG).

Key Enablers for DBT:

- **JAM Trinity:** DBT by leveraging the JAM (Jan Dhan, Aadhaar and Mobiles) trinity and the technological prowess offers to drastically improve the benefit delivery system in the country. The JAM Trinity will enable this novel system to transfer benefits in a leakage-proof, well targeted, cashless and timely manner.
- **Business Correspondents (BC) Infrastructure:** Reserve Bank of India introduced Business Correspondents / Banking Correspondents (BC) as an alternative to brick and mortar banks for infrastructure. Business Correspondents/ Bank Mitras will have a vital role in operationalising the programme and ensuring the last mile connectivity. The strong presence of BCs will ensure that payments are disbursed to the beneficiaries on time, at their doorstep and of full value.
- **Payments Bank:** The main objective of payments bank is to widen the spread of payment and financial services to small business, low-income households, migrant labour workforce, etc. in secured technology-driven environment across the country. In 2015, the Reserve Bank of India gave in-principle licences to eleven entities to launch payments banks. With payments banks, RBI seeks to increase the penetration level of financial services in the remote areas of the country.
- **Mobile money:** Mobile money is a fast moving way of payment in the country and could be helpful in providing solution to last mile issue for better accessibility of DBT. There is a need to develop a comprehensive eco-system for carrying out cashless transactions over mobile platform using Aadhaar as identifiers.

Significance of DBT:

- **Increases the transparency:** With DBT in place, the intended amount for the welfare scheme and its movement can be tracked to and forth thereby providing more transparency and ensuring accountability.
- **Addresses Corruption:** DBT helps in reducing the interactions between the beneficiary and officials, thereby reducing the possibility of bribe and corruption.
- **Financial inclusion:** The DBT comes with the pre-requisite of a preferably Aadhaar linked Savings account and this brings the beneficiary into formal economy and introduces him/her to the banking system, pushing the marginalized towards financial inclusion.
- **Targeted beneficiaries:** By using DBT the intended benefit is directly transferred to the accounts of the beneficiaries, cutting down the middle administrative layers that were delaying the process of transfer earlier.
- **Reduces the ghost beneficiaries:** The Aadhaar integrated transfer mechanism with biometric authentication helps to remove the ghost beneficiaries existing in the system, as multiple or fake entries can easily be mapped.

Challenges in DBT:

- **Digital literacy:** The digital literacy of the people in rural areas is comparatively poor and they might be even unaware of the benefits that they are eligible to receive and are left out from receiving the benefits that are designed for them.
- **More choices:** By providing the beneficiary with cash, the intended money may be used in unproductive areas like liquor, gambling etc. thereby derailing the purpose of welfare.
- **Lack of infrastructure:** There exists many regions in the country, which are yet to be brought under the regular banking system like bank branches and ATM's and it is difficult to process DBT for those areas.
- **Profiteering by Banks:** Many banks have levied a fee for transactions in the Jan Dhan Accounts, over a prescribed limit, thereby discouraging the poor beneficiaries from using the banking system.

Routing DBT:

Central Plan Scheme Monitoring System (CPSMS), being implemented by the **Office of Controller General of Accounts** will act as the common platform for routing DBT. CPSMS can be used for the preparation of beneficiary list, digitally signing the same and processing of payments in the bank accounts of the beneficiary using the Aadhaar Payment Bridge of **NPCI (National Payments Corporation of India).**

Other than cash and kind transfers, the **Direct Benefits Transfer scheme** also transfers funds and subsidies to several non -governmental functionaries that help implement government policies until the very end. This includes community workers, NGOs, teachers in aided schools, etc. They are not beneficiaries but are given training, wages, and incentives to serve the beneficiaries.

Practice Question

Q. Examine the concept of Direct Benefit Transfer (DBT) and its role in improving the efficiency and effectiveness of social welfare programs

PYQ:

Q. In what way could replacement of price subsidy with direct benefit transfer (DBT) change the scenarios of subsidy in India? (2015)

3. STAGNATED MUNICIPAL EXPENDITURE

Context: RBI released a report on municipal finances. That highlights the inadequacy of own revenues of Municipal Corporations and their increasing dependence on grants & transfers.

About Municipal Expenditure:

Through **73rd and 74th amendment to the constitution,** several powers and functions were devolved to the local government. Functions were devolved to urban local bodies for urban areas. However, municipal expenditure in India has been stagnant for over a decade, which has created several challenges in urban areas. To check the functioning of ULBs, RBI recently released a report on municipal finances which highlighted the inadequacy of own revenues of Municipal Corporations and their increasing dependence on grants and transfers.

Issue of stagnated municipal expenditure in India and challenges associated with it:

- **Inadequate Collection efficiencies:** Collection efficiency of property tax, the single largest source of revenues for ULBs, ranged from 32% to 72% for the five states (**Karnataka, Madhya Pradesh, West Bengal, Himachal Pradesh, and Jharkhand**).
- **Borrowings account only for a minute share of GDP:** Gross municipal borrowings account for only less than 0.05% of GDP for all municipal corporations. It was around 6% of the total receipts of municipal corporations at the national level.
- **Weak fiscal capacity:** Municipalities in India have limited fiscal capacity, as they depend heavily on transfers from state and central governments. This can lead to a lack of resources and a limited ability to invest in infrastructure and services.
- **Limited revenue sources:** Municipalities in India have limited revenue sources, with property taxes being the primary source of revenue. The low tax base and inadequate tax collection mechanisms can limit their ability to generate revenue and invest in infrastructure.
- **Inefficient expenditure management:** Municipalities in India often face challenges in managing their expenditures effectively. This can include issues such as corruption, inefficiencies, and low levels of accountability.
- **Political factors:** Municipalities in India are often subject to political pressures, which can influence their expenditures. This can lead to a focus on short-term projects rather than long-term infrastructure development.
- **Pending Accounting and audit:** As per CAG audit reports, for 2,779 ULBs across thirteen states, approximately 4,400 audits were pending in respect of their annual accounts, for years ranging from 2008-09 to 2015-16.
- **Total revenues of ULBs in India to India GDP:** Aggregate revenues of all ULBs in India put together are estimated at less than INR 150,000 cr. This amounts to less than 1 % of GDP compared to greater than 6% in Brazil and South Africa. Consequently, both revenue- wise and expenditure-wise, ULBs are not significant enough as institutions of local self- government.

Suggestive Measures:

- **Fiscal decentralization:** State governments need to devolve more own revenue streams to ULBs and give them greater powers over such revenue streams. SFCs need to be overhauled into credible institutions, and state governments need to be held accountable for timely consideration and response to ATRs.

- **Revenue optimization:** ULBs need to optimise own revenue streams devolved to them by reviewing and reforming the five stages of the property tax lifecycle namely valuation, assessment, billing, collection and reporting. Particular attention needs to be paid to completeness of assessment and billing, and maximising collection efficiency.
- **Fiscal responsibility and budget management:** There is a need for a **FRBM framework for ULBs** that focuses on realistic budget estimates, timely, credible and standardized audited annual accounts, uniform accounting standards and prudent financial accounting principles, medium-term fiscal plans, performance reporting and citizen participation in budgeting and financial management.
- **Institutional capacities:** State governments need to build capacities of ULBs in two particular areas.
  - **First,** they need to estimate and then provide access to adequate number of skilled staff in revenue and accounts departments.
  - **Second**, integrated information systems that handle end to-end transaction processing and reporting need to be implemented.
- **Special purpose vehicle:** MCs can choose to finance through **special purpose vehicles (SPVs)** and State-pooled finance entities.
  - **For example**, China's **Local Government Financing Vehicle (LGFV)** is an investment company that sells bonds in the bond markets for financing real estate development and other local infrastructure projects.

According to a new **World Bank report's estimate**, India will have to invest **USD 840 billion** over the next 15 years, or **an average of USD 55 billion per annum** into urban infrastructure to effectively meet the needs of its fast-growing urban population. Furthermore, effective governance of cities is critical to sustainable development as per **Sustainable Development Goal 11- Sustainable Cities and Communities**. Thus, it is high time that local governments and their finances take prominence in the governance discourse.

Practice Question

Q. Evaluate the role of central and state governments in supporting municipal finance and addressing the funding gaps. Discuss the potential consequences of stagnated municipal expenditure, including infrastructure decay, inadequate public services, and social inequalities.

4. IMPACT OF FREEBIES ON INDIAN STATES FISCAL HEALTH

Context: Experts flag risk to economy if freebies are roled out without any checks.

Background:

The fiscal health of Indian states has been a matter of concern, with many states facing significant challenges in managing their finances. Excessive freebies are one of the reasons for the deteriorating fiscal health of Indian states. The provision of freebies like loan waivers, subsidies, and other benefits, without adequate planning and budgeting, can have a severe impact on the fiscal deficit and put pressure on government revenue.

Indian states' fiscal health:

- **High Fiscal Deficit:** Many Indian states are struggling with high fiscal deficits, which means that their expenditure is much higher than their revenue. High fiscal deficits can lead to a state's indebtedness, which can negatively affect its credit rating, making it more challenging to borrow in the future. The State Bank of India (SBI) in its recent analysis has said that the finances of 18 major states demonstrated that the average fiscal deficit as of gross state gross domestic product (GSDP) is around 3.6 per cent of gross domestic product (GDP) for FY23.
- **Low Tax Revenue:** The tax revenue of Indian states is relatively low, primarily due to the low tax base and evasion. The low tax revenue limits the states; ability to fund essential social and economic development projects, leading to inadequate infrastructure and public services. For example, north-eastern states are well below the all-India average.

- **High Debt Burden:** Many Indian states have a high debt burden due to excessive borrowing. This can lead to higher interest payments and can negatively impact the state's finances in the long run. Five states, namely, Bihar, Kerala, Punjab, Rajasthan, and West Bengal, figure among the most stressed states fiscally, as per a Reserve Bank of India.
- **Poor Expenditure Management:** Poor expenditure management is another challenge faced by many Indian states. Expenditure on non-essential items like freebies, subsidies, and other such measures is often high, leading to a strain on the state's finances. Additionally, inefficient management of government projects can result in cost overruns and delays. Andhra Pradesh, Madhya Pradesh and Punjab incur a very high subsidy bill by doling out freebies that go over and above 10% of their total revenue receipts.

Impact of freebies on fiscal health of states:

- **Financial burden on states:** People pay taxes to the government to improve infrastructure, health care, public facilities, development, and the country's growth. However, taxpayer funds are used for freebies during elections. It discourages the honest taxpayer whose money is used to pay for the freebie.
    - **For instance**: Punjab State Government has been in debt since a long time, at present accounting to Rs 3 lakh crores with GSNP of 2021-22 standing at approx.
- **High revenue deficit:** States have fewer sources of income and a greater need for grants from centers to meet their basic needs. With the uncontrolled rolling out of freebies the states revenue deficit have been increasing.
    - **For example:** Andhra Pradesh, Madhya Pradesh and Punjab incur a very high subsidy bill by doling out freebies that go over and above 10% of their total revenue receipts. The three states give away freebies worth 14.15, 10.85 and 17.8%of their revenue income.
- **Freebies come under revenue expenditure:** As the Fiscal Responsibility and Budget Management (FRBM) Act requires states to eliminate revenue deficit; states have limited resources to spend on revenue expenditure, whereby those available for freebies will be restricted.
- **No capital formation:** Because there is no capital formation or future returns from freebies to the government, they put pressure on the government's budget. The burden of interest payments will increase as the deficit grows.
- **Inflation:** The distribution of free goods causes economic inflation because freebies include free power, water, and other types of consumer goods and these are utilized by the people without paying which in turn disturbs the demand and supply curve thus undermining the fiscal condition of the state by causing an artificial ecosystem of demanded products or commodities.

Policies of doling out freebies and subsidies by some of the state governments could spell doom in the long run like the current **Sri Lankan crisis**. Freebies potentially undermine credit culture, distort prices through cross subsidization eroding incentives for private investment and dis-incentivise work at current wage rate leading to a drop in labor force participation. Hence, there is a need for states to rationalize the extent of freebies that are offered while striking a balance between welfare expenditure.

Practice Question

Q. The costs of providing freebies need to be carefully managed to avoid straining public resources and potentially leading to fiscal imbalances. Comment

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9

CHANGES IN INDUSTRIAL POLICY & THEIR EFFECTS ON INDUSTRIAL GROWTH

1. SPECIAL ECONOMIC ZONES (SEZS)

Context: Union Budget 2023: Make SEZs manufacturing, innovation and export hubs.

Incentives for setting up SEZ:

- Duty free import and domestic procurement of goods for the development, operation, and maintenance of your company/SEZ unit
- 100% income tax exemption on export income for first five years, 50% for five years thereafter, and 50% of the export profit reinvested in the business for the next five years
- Exemption from GST and levies imposed by state government (supplies to SEZs are zero rated under the IGST Act, 2017, meaning they are not taxed).
- Exemption from Minimum Alternate Tax (MAT)
- Single window clearances for all state and federal government approvals
- Exemption in electricity duty and tax on sale of electricity by certain states in India
- Presence of customs officer in the SEZs to facilitate and expedite the trade processes

About Special economic zones:

- A special economic zone (SEZ) is an area in a country that is subject to different economic regulations than other regions within the same country.
- SEZs in India functioned from 2000 to 2006 under the provisions of the Foreign Trade Policy and fiscal incentives were made effective through the provisions of relevant statutes. The Special Economic Zones Act was passed in 2005.
  - Asia's first Export Processing Zone (EPZ) was established in 1965 at Kandla, Gujarat state.

Despite several efforts taken by the government, SEZs have not been able to grow and induce development at the expected pace. UNCTAD report suggests that SEZ exports did not rise at a faster rate than overall exports even before the pandemic.

Factors that have impeded the growth of India's SEZs:

- **Difficulty in obtaining land:** Some state governments in India (e.g. West Bengal, Odisha) countered strong political resistance to acquiring land for SEZ development by the private sector. The resistance led to violent conflicts and loss of material property and human lives. With state governments accused of being 'brokers' for industry by forcibly acquiring agricultural land, SEZ projects were mired in controversy.
- **Lack of federal coordination:** State governments accused of being 'brokers' for industry by forcibly acquiring agricultural land, SEZ projects were mired in controversy. As states realized the political cost of promoting SEZs and began backing off from land acquisitions, developers without sufficiently large financial set up were saddled with large debts.
- **Non-Availability of funds:** Government should not have introduced the SEZ scheme without an effective policy of land acquisition, banks on the other hand SEZs increasingly became synonymous with non-performing loans and risky ventures.

- **Depressed demand:** Poor export prospects have led to low capacity utilizations in many zones. Several upcoming SEZs have failed to take off with manufacturers refraining from using the facilities in the zones due to low global demand for their products.
- **Pressure on financial system:** There are quite a few IT-SEZs in India that houses global capability centers of large multinationals. These are companies that produce high value- added services to clients worldwide, thereby generating employment for the skilled workforce in India.

To revive interest in SEZs and promote more inclusive economic hubs, the government has introduced a bill on **Development of Enterprise and Service Hubs (DESH), 2022.** The Bill is an attempt to remove restrictions around businesses that were allowed inside SEZs, thereby attracting a wider set of occupiers and infrastructure growth.

Factors that have impeded the growth of India's SEZs:

- **Development hubs:** The bill proposes to create two kinds of development hubs – enterprise hub and the services hub, as enclaves for the purposes of the promotion of economic activity, employment generation, integration with global supply and value chains and maintenance of manufacturing and export competitiveness, development of infrastructure facilities, promotion of investments, and investment in research and development.
- **Multi-disciplinary approach:** It proposes to do away with industry-specific zones and allow multi-disciplinary tenants to occupy space across all SEZs, Thus increasing the scope of occupancy.
- **Dynamic market policy and revenue base:** Tenants of SEZs no longer are required to sell only in the international market. With enactment of DESH, tenants of SEZs will be allowed to cater to the local market and indulge in sub-contracting to firms outside of SEZs. Such firms, naturally, will attract an "equalization levy" to bring tax treatments fairly at par with non-SEZ occupiers.
- **Digitalization:** Benefits such as single-window digitized approval mechanisms, self- certification for developers and occupiers of DESH for defined set of business activities, removal of restrictions around foreign currency payments, allowing partial de-bonding of SEZ premise by developers, single point of contact across multiple ministries in the central government etc. aims at significant improvement in Ease of Doing Business through the DESH bill.
- **Reformed evaluation:** The evaluation of units would not be based on net foreign exchange. Instead the performance of the units will be measured on parameters such as investment, employment generation, etc.

India was one of the earliest countries to develop dedicated export-processing zones (EPZs). The Kandla EPZ in the state of Gujarat on India's west coast was developed in 1965 and was the third such zone in the world, while being the first to come up in Asia. But the economic impact of these zones was limited given their poor infrastructure linkages with the rest of the domestic economy and India's persistence with an overall inward-oriented foreign trade and investment policy. It is expected that the proposed DESH Bill will address the inefficiencies in the SEZs and act as a booster dose for the Indian economy, especially in the current geo-political and economic landscape.

Practice Question

Q. Analyze the benefits and challenges associated with the establishment of Special Economic Zones (SEZs). Suggest strategies to maximize the potential of SEZs in the Indian economy, ensuring sustainability, and balanced regional development.

PYQ:

Q. There is a clear acknowledgement that Special Economic Zones (SEZs) are a tool of industrial development, manufacturing and exports. Recognising this potential, the whole instrumentality of SEZs require augmentation. Discuss the issues plaguing the success of SEZs with respect to taxation, governing laws and administration. (2015)

2. PHARMACEUTICALS INDUSTRY

Context: The pharmaceutical industry in India is expected to reach $65 Bn by 2024 and to $130 Bn by 2030.

About Pharmaceutical industry:

- The pharmaceutical industry in India is currently valued at **$50 Bn.**

- India is a major exporter of Pharmaceuticals, with over 200+ countries served by Indian pharma exports. India supplies over 50% of Africa's requirement for generics, ~40% of generic demand in the US and 25% of all medicine in the UK.
- India also accounts for 60% of global vaccine demand, and is a leading supplier of DPT, BCG and Measles vaccines. 70% of WHO's vaccines (as per the essential Immunization schedule) are sourced from India.
- The Average Index of Industrial Production of Manufacturing of pharmaceuticals, medicinal chemicals and botanical products in the FY 2021-22 is 221.6 and has grown by 1.3%
- For the period 2021-22, export of drugs and pharma products stood at $24.6 Bn compared to $24.44 Bn as of 2020-21. The Indian pharma industry witnessed exponential growth of 103% during 2014-22 from $11.6 bn to $24.6 Bn.

Reasons why pharmaceuticals industry is flourishing in India:

- **Strong domestic demand:** The growing middle class and aging population have created a large demand for pharmaceutical products.
- **Low cost of manufacturing:** Cost of manufacturing 33% lower than western markets due to factors such as cheap labor, affordable equipment, competitive property rates and low-cost utilities.
- **Favorable government policies:** The Indian government has implemented several policies to promote the growth of the pharmaceutical industry.
  - These include tax incentives, R&D grants, and support for technology transfer.
- **Skilled workforce:** India has a strong pool of skilled scientists, researchers, and technicians who are involved in research and development, quality control, and manufacturing.
- **Expanding exports:** India is the 12th largest exporter of medical goods in the world. Indian drugs are exported to more than 200 countries in the world, with US being the key market. Generic drugs account for 20% of the global export in terms of volume, making the country the largest provider of generic medicines globally.
- **Foreign investment:** Pharmaceutical is one of the top ten attractive sectors for foreign investment in India. The cumulative FDI equity inflow in the Drugs and Pharmaceuticals industry is US$ 20.96 billion during the period April 2000-September 2022. This constitutes almost 3.35% of the total FDI inflow received across sectors.

Challenges faced by pharmaceuticals industry:

- **From regulator side:** Doing a post-mortem kind of work by inspecting the drugs after getting into market. Low data collection on drugs coupled with insufficient training to drug inspector leading to huge malpractice among drug sellers
- **From Marketing side:** Medical representatives and drug sellers inefficient training to meet the man power along with prevalence of Quack(fake doctor) increases risk of life of patients . Pharma companies unethical pratice of providing freebies and gifts to Doctors to promote their drugs
- **Quality issues:** Quality is getting compromised due to high demand for drugs among people. This is evident by wide scale recall of drugs in India.
- **Low R&D investment:** India only invests 0.7% of its GDP for research and investment. This is very low compare to the demand in the sector
- **International Challenges:** Global Pharma companies accuse Indian pharma companies as an abuser of Patent laws and criticise India's Compulsory Licensing Policies. India nearly 90% depend on China for its Active Pharmaceutical Ingredients.

Government initiatives to promote the pharmaceuticals industry:

- **Ayushman Bharat Digital Mission (ABDM):** Under the ABDM, citizens will be able to create their ABHA (Ayushman Bharat Health Account) numbers, to which their digital health records can be linked. This will enable creation of longitudinal health records for individuals across various healthcare providers and improve clinical decision making by healthcare providers.
- **PLI Scheme** for promotion of domestic manufacturing of critical Key Starting Materials (KSMs)/ Drug Intermediates (DIs)/Active Pharmaceutical Ingredients (APIs) in India: The outlay of the scheme is Rs 15,000 crore and the tenure of the scheme is proposed to be from 2021-22 to 2028-29.
- **Promotion of Bulk Drug Parks:** It aims to bring down the cost of manufacturing of bulk drugs by creation of world class common infrastructure facilities supported by the Central Government.

- **Pharmaceutical Promotion & Development Scheme (PPDS):** The scheme aims at promotion, development and export promotion in pharmaceutical sector by extending financial support for conducting seminars, conferences etc.
- **Pharma Bureau:** It provides facilitation to investors and resolution of their interdepartmental coordination issues in the Pharmaceuticals and Medical Devices sector.
- **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP):** It aims to make quality generic medicines available at affordable prices to all especially for the poor and the deprived ones.

The Indian Government has taken many steps to reduce costs and bring down healthcare expenses. The **National Health Protection Scheme**, which aims to offer universal healthcare, the ageing population, the rise in chronic diseases, and other government programmes, including the opening of pharmacies that offer inexpensive generic medications, should all contribute to boost the Indian pharmaceutical industry. Speedy introduction of generic drugs into the market has remained in focus and is expected to benefit the Indian pharmaceutical companies.

Practice Question

Q. Discuss the significance and growth of India's pharmaceuticals industry in the global context. What are the implications of India's pharmaceutical exports on the country's economy and its contribution to healthcare accessibility worldwide.

3. SEMICONDUCTOR INDUSTRY AND DESIGN LINKED INCENTIVES

Context: Semiconductor industry will double from current $600 billion to $1 trillion plus.

Background:

Semiconductor industry, which is now an inseparable part of almost all sectors, has emerged as one of the most important industries. It forms an essential part of all electronic items. Ministry of Electronics and Information technology has announced the Design Linked Incentive (DLI) Scheme to offset the disabilities in the domestic industry involved in semiconductor design in order to not only move up in value-chain but also strengthen the semiconductor chip design ecosystem in the country.

Current status of the semiconductor industry of India:

- The global semiconductor industry is currently valued at $500-$600 billion and caters to the global electronics industry currently valued at about $3 trillion.
- India has a very fast growing electronics system design manufacturing (ESDM) industry. India also has a strong design base.
- According to the Department of Electronics and Information Technology (DeitY), nearly 2,000 chips are being designed every year in India and more than 20,000 engineers are working on various aspects of chip design and verification.
- The government has a strong focus in developing the ESDM ecosystem in India. Several subsidies and other incentives are on offer for setting up electronics manufacturing units in India. The Union Cabinet has allocated an amount of ₹76,000 crore for supporting the development of a ‘semiconductors and display manufacturing ecosystem’.
- A report by Deloitte estimated that the Indian semiconductor market may reach $55 billion by 2026 with more than 60% of the market being driven by three industries.

For rapid development of the semi-conductor industry following steps is required:

- Bring manufacturing closer to home with both entirely new fabs and the expansion of existing facilities.
- Manage the diversification risks and challenges that come with localization and friendshoring.
- Digitally transform and digitize many parts of their processes: financial planning and operations, order management, and supply chain.
- Address and balance the semiconductor talent equation: shortages in some roles but layoffs in others.
- Establish and accelerate the path toward achieving environmental, social, and governance goals, particularly around sustainability.

Ways in which Design linked Incentive will give a major boost to semi conductor industry in India:

- **Increased Participation:** 50% of the project cost across all technology nodes for establishing semiconductor labs, including cutting-edge computing chips and those used in the power, telecom, and automotive sectors will be funded by the government. With such high incentive more players are entering the semi-conductor industry leading to an increase in manufacturing base.
- **Incentivize companies:**The scheme was initially introduced in India to incentivize companies for incremental sales of products manufactured in India over the base year. They have been particularly intended to increase domestic manufacturing in the sunrise and strategic sectors, minimise import bills and curb cheaper imports, improve the cost competitiveness of domestically manufactured goods, and promote domestic capacity and exports.
- **Promotes in house production:** PLI aims to provide subsidies to companies that manufacture their goods in the country as the government offers incentives for additional sales in form of tax breaks and reduced import duties. These schemes are linked to the organisation's performance.
- **Domestic Resources:** The semiconductor industry is an important and time taking component in the electronics ecosystem for countries like India. All our efforts to make motherboard and networking will get more local components with the rise of the semiconductor industry while cutting on the import bill.

Issues/Challenges	Required measures
• **Dominance of Few Countries:** Taiwan and South Korea dominated the semiconductor manufacturing space. 75% of the semiconductor manufacturing capacity is concentrated in East Asia and China. • **Pursuing Western Companies:** India needs to attract foreign investment to built-up chip fab capacity by overcoming the intense competition from other countries. • **Inadequate logistics and absence of proper waste disposal** have further exacerbated the poor state of its production.	• **Supporting startups Ecosystem** • **Budgetary support** • **Impetus on back-end of manufacturing:** India should especially look at back-end of manufacturing such as assembly, packaging and testing. Once it stabilises and an ecosystem develops, front-end of manufacturing will follow. • **Cooperation of states:** Transport logistics: Roads, railway and air connectivity to the site are also critical.

India is poised to be the second largest market in the world from the perspective of scale and growing demand for semiconductor components across several industries and applications. The government's initiatives, from 'Make in India' to "Design Linked Incentive", will help accelerate this journey but will need some additional reforms to increase local manufacturing and sourcing of semiconductor components. If this is done, the semiconductor market can be a major contributor to economic growth, and India's push to become a $5-trillion economy.

Practice Question

Q. Examine the importance of the semiconductor industry and the role of design-linked incentives in promoting its growth and competitiveness.

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10

EXTERNAL SECTOR

1. FOREIGN TRADE POLICY 2023

Context: The Union Ministry of Commerce and Industry notified the Foreign Trade Policy 2023.

What is foreign trade policy 2023 about?

- **Motto:** Long term excellence and productivity.
- **Aim:** New policy aims to almost triple India's goods and services exports to 2 trillion dollars by 2030, from an estimated 760 billion dollars in 2022-23.
- The FTP 2023 aims at process re-engineering and automation to facilitate ease of doing business for exporters. It also focuses on emerging areas like dual use high end technology items under **SCOMET (Special Chemicals, Organisms, Materials, Equipment, and Technologies)**, facilitating e-commerce export, collaborating with States and Districts for export promotion.
- To process re-engineering and automation to facilitate ease of doing business for exporters.
- The policy emphasizes the use of automated IT systems with risk management systems for various approvals and codifies implementation mechanisms in a paperless, online environment.
- The policy also reduces fee structures and IT-based schemes to make it easier for MSMEs and others to access export benefits.

What is Foreign Trade Policy?

- Foreign trade policy are a set of guidelines and instructions which are established by **Directorate General of Foreign Trade (DGFT)** related to import and export of goods in India. This is announced after every 5 years.
- It creates various expectations for exporters, traders and manufacturers.
- India's foreign trade policy is guided by the **Foreign Trade (Development and Regulation) Act, 1992**, which was adopted when the economic policy reforms were initiated.
- **Foreign Trade Policy (2023)** is based on continuity of time-tested schemes facilitating exports as well as a document which is nimble and responsive to the requirements of trade.
  - It is based on principles of 'trust' and 'partnership' with exporters.
  - It replaced the extant policy 'FTP 2015-20'. The new FTP comes into effect from April 1, 2023.

Need for the policy:

India has reached record high Export Performance and India's Merchandise and Services exports are expected to cross record **USD 760 Billion in FY 2022-23**. A clearly demarcated FTP is required for promoting exports through collaboration, ease of doing business, identifying potential areas of trade relations and beneficial integration into the global economy.

What's new?

- The FTP 2023 introduces several new schemes, such as one time Amnesty Scheme for exporters to close old pending authorizations and start afresh.
- It also encourages the recognition of new towns through the Towns of Export Excellence Scheme and the recognition of exporters through the Status Holder Scheme.

- The policy also streamlines the popular Advance Authorization and EPCG schemes and enables merchanting trade from India.
- The policy builds partnerships with **state governments** and takes forward the **Districts as Export Hubs (DEH) initiative** to identify export-worthy products and services and resolve concerns at the district level.
- Another crucial aspect of the FTP 2023 is the promotion of exports from the **district level** and accelerating the development of the grassroots trade ecosystem.
- The policy also aims to prepare district-specific export action plans for each district outlining the district-specific strategy to promote the export of identified products and services.

Issues/Gaps in the policy

- **Ineffective at the present juncture:** India's foreign trade policy continues to be largely structured on the earlier policy documents, and draws its legal basis from the three-decade-old Foreign Trade (Development and Regulation) Act; its incongruence with the needs of present times is obviously huge.
- **Lack of utilization of FTAs:** The government was unable to use the rules of the multilateral trading system as well as a majority of the 13 free trade agreements (FTA) that India has signed thus far.
  - In most of these agreements, India's trade deficit has ballooned and this is simply because the exporters have been unable to take advantage of the preferential market access that has been offered by the trade partners.
- **Lack of preparedness related to regulatory standards:** There is current pressure with India to devise Indian-specific standards, which is creating barriers to trade in a range of industry sectors. India frequently fails to notify the WTO of new standards and often does not allow time for discussion with its trading partners prior to implementation.

Significance of the scheme:

- **Better partnership:** The Foreign Trade Policy 2023 will achieve better export promotion by fostering partnerships between exporters, states, districts, and Indian Missions.
- **Ease of doing business:** The policy will prioritize enhancing the ease of doing business and targets emerging sectors, such as e-commerce and export hubs.
- **New boost to the Indian foreign trade:** India's exports **were $435 billion in 2015-16** when the previous policy was introduced and have grown nearly **75% to an estimated $760 billion in 2022-23.** New policy will give new boost to this export growth.

Overall, the FTP 2023 is a dynamic policy document that aims to boost India's exports and promote its growth manifold in the coming years. With its emphasis on ease of doing business, technology interface, and collaboration, the policy is expected to facilitate the growth of the export industry, while also creating a favourable environment for MSMEs and other businesses to access export benefits.

Practice Question

Q. In light of the slowdown in global *trade*, do you think that the Foreign trade policy 2023 can boost exports of *India's* goods and services. Substantiate your answer with relevant facts.

2. DE-DOLLARIZATION

Context: With recent developments in the global landscape like BRICS nations proposal of creating new currency for payments on cross border trade and Malaysia's decision to settle trade in Indian rupees have given fuel to de dollarization.

What is de-dollarization?

- DE-dollarization refers to a process where in countries tend to reduced their dependence on US dollar by replacing it with other currencies as the global reserve currency.
- The concept has gained momentum to undermine the predominance of US and its currency as a medium of exchange driving the world trade.

- BRICS (Brazil, Russia, India, China, and South Africa) nations are major proponents of de-dollarization.

Reasons why US dollar is losing its dominance:

- **The decline of American political influence:** around the world also plays a role here too since other nations no longer feel beholden by Washington's foreign policy dictates. **For Instance,** India (one of the close partners to the US) has been fearlessly trading with Russia, especially for discounted crude oil despite America's sanctions.
- **Rise of BRICS:** as a major economic bloc, working together to create their own currency system that would rival the US dollar as a reserve currency. The idea is to reduce dependence on the dollar and create a more balanced global financial system.
- **Chinese Yuan is becoming an important player in global trade** and investment making it popular to be used as a currency of exchange rather than relying solely on dollar.
- **Rise of Indian Rupee:** The pressure mounts on dollar with **Indian rupee coming up as a globally traded currency** as close to 18 countries has already signed up for the rupee settlement system.
- **Mounting Debt:** The question of America's mounting debt levels which could escalate the possibility of issues if countries hold their foreign reserves exclusively in US dollar.

Advantages of De-Dollarization:

- **Reducing Dependence on the US Dollar:** By using other currencies or a basket of currencies, countries can reduce their dependence on the US dollar and the US economy, which can help to mitigate the impact of economic and political changes in the US on their own economies.
- **Improving Economic Stability:** By diversifying their reserves, countries can reduce their exposure to currency fluctuations and interest rate changes, which can help to improve economic stability and reduce the risk of financial crises.
- **Increasing Trade and Investment:** By using other currencies, countries can increase trade and investment with other countries that may not have a strong relationship with the US, which can open up new markets and opportunities for growth.
- Direct Trade in country's national currency leads to saving on currency conversion spreads,
- **Reducing US monetary Policy Influence:** By reducing the use of the US dollar, countries can reduce the influence of US monetary policy on their own economies.

Challenges of De-Dollarization:

- **Currency volatility:** De-dollarisation can lead to increased currency volatility as countries transition to using new currencies for trade. This can create uncertainty for businesses and investors.
- **Limited acceptance of local currencies:** Local currencies may not be widely accepted outside of their home countries, which can create difficulties for international trade. Lack of liquidity: Local currencies may have limited liquidity compared to the US dollar, which can create challenges for large transactions.
- **Limited use in financial markets:** Local currencies may not have the same level of use in global financial markets as the US dollar, which can limit their usefulness for international trade.
- **Resistance from established players:** Established players in the global financial system, such as the US and other Western powers, may resist de-dollarisation efforts, which can create geopolitical tensions.
- **Implementation challenges:** There may be challenges in implementing de-dollarisation, including developing new payment systems and addressing legal and regulatory barriers.

The US dollar's dominance is facing serious challenges now. The rise of **BRICS and China's Yuan** as alternative reserve currencies, coupled with concerns about America's mounting debt levels and geopolitical risks are all contributing to a shift away from the dollar. It remains to be seen how long the US dollar is able to hold its reserve currency status.

Practice Question

Q. Discuss the concept of de-dollarization and its implications for global financial stability. Substantiate your answer with relevant examples and case studies.

3. CURRENCY DEPRECIATION

Context: The Indian rupee depreciated by around 10 per cent against the US dollar in 2022 on account of sharp appreciation of the greenback, as the US Federal Reserve tightened its interest rate to check inflation amid the uncertainties surrounding the Russia-Ukraine conflict.

What do you mean by currency depreciation?

Currency depreciation is referred to as decline of a currency's value relative to another currency. Fundamentally, it is considered that currency depreciation provides avenues for more exports but theories and past experience suggest we can't count on a weaker currency for an export boost until the global economy recovers.

Benefits of currency depreciation:

- Exports become cheaper, more competitive to foreign buyers. Therefore, this provides a boost for domestic demand.
- Travel to India gets cheaper; local industry may benefit.
- Those working abroad can gain more on remitting money to their homeland.
- Ultimately, it assists in reducing the current account deficit (CAD).

A country's exports primarily depend on two factors:

- Customer sensitivity to the export price. If export demand is highly price responsive, then a decrease in export prices raises export quantity more than proportionately, all else remaining the same. Export revenue, which is export quantity multiplied by price, therefore rises. If all other factors do not remain constant, especially if the export prices of competitors also decline, then the increase in our export demand and revenue, if any, would be less.
- Export demand depends on sensitivity to buyers' incomes, namely the income elasticity of exports. All else remaining the same, if the income elasticity of exports is less than one, then a decline in buyers' incomes leads to a reduction in export demand, but not too much. In contrast, a decline in buyers' income would reduce export demand and therefore export revenue significantly if the income elasticity is greater than one.

Recent global events such as Russia-Ukraine war, west driven inflation, spike in crude oil prices, COVID-19 has impacted the demand of commodities in the market due to decline in buying capacity of the customers. Hence, depreciation or weakening of a currency may not lift up the exports due to weak global demand, causing a domino effect where the economy is already hurting due to weakening of currency amid the global scenario and the exports not picking up due to weak global demand resulting in high Current account deficit (CAD) pushing the currency more into the blink of collapse.

Measures to arrest slide of Rupee:

We import crude oil in billions. Hence, the depreciation of the local currency is harmful to the economy. RBI has to intervene to stop the sharp depreciation. Below are some ways RBI can stop the rupee depreciation:

- **Sell forex reserves:** RBI can sell (it is already doing it) a part of its foreign forex reserves to control the falling rupee. In 2021, India's foreign exchange reserves stood at $642 billion. The latest data show that the forex reserves have fallen to $545 billion. It had prevented a sharp fall in the Indian rupee, unlike other currencies.
- **Boost capital inflows in NRI accounts:** The RBI can take measures to encourage capital flows in NRI deposits. When the NRIs start to deposit money in India, they would be selling dollars to convert it to a rupee, which will help the cause. RBI can reach out to banks so banks can offer non-residents higher interest rates on deposits and short-term bonds.
- **Buy/sell swap:** In a buy/sell swap, the Indian currency is injected into the banking system, while taking out dollars. The swap will help the RBI keep the currency rates in check, although, in a limited way.
- **Cut non-essential imports and increase exports:** These include steps to curb the import of non-essential goods and encourage the export of domestic goods, which will help in addressing the current account deficit.
- **Encouraging Indian borrowers** to issue rupee-denominated **'masala bonds'** to facilitate the inflow of dollars and de-risk the economy from fluctuations in the exchange rate.

Measures like **internationalizing the Indian rupee** and settling **trade agreements** between India and other nations in rupees can curb the currency's fall. Foreign direct investment should be encouraged in Indian industries from. Besides, India has to export goods and services worth at least **$2.5 trillion** if it wants to make its economy reach **the $5-trillion mark by 2025** since exports currently make up around 25% of the GDP.

Practice Question

Q. Examine the causes and consequences of currency depreciation in an economy. Discuss the measures that can be taken to mitigate its adverse effects.

4. FOREX RESERVE

Context: India's foreign exchange reserves saw a dip of $2.397 billion, dragging the position to a three-month low of $560 billion as on March 10, 2023 which has impacted the atmosphere of investment in the country.

About forex reserve:

Forex also known as foreign exchange reserves are assets held on reserve by a central bank in foreign currencies, in case of India Reserve Bank of India (RBI) holds it. These reserves are used to back liabilities and influence monetary policy of a country. Forex reserves are significant component of India's economic stability.

Significance of Forex reserve:

- **To maintain liquidity in case of an economic crisis:** A central bank can step in and exchange its foreign currency for the local currency ensuring companies can continue to import and export competitively.
- **To meet a country's international finance obligations:** These could include paying debts, financing imports and absorbing sudden capital movements.
- **To fund internal projects:** Infrastructure or industry programmes are sometimes financed this way.
- **To reassure foreign investors:** Wars or internal unrest can spook investors who may look to move their money out of the country. Holding forex reserves can project an air of confidence and calm investors' fears.
- **To diversify their portfolio:** By holding different currencies and assets in reserve, a central bank can diversify its risk and provide protection should one investment decline.
- **Limit vulnerability:** helps limit any vulnerability because of a sudden disruption in foreign capital flows, which could happen during a crisis. Holding liquid forex thus provides a cushion against such effects and gives the confidence that there would still be enough forex to support the country's crucial imports in case of external shocks.
- **Support the domestic currency:** Forex are needed to support, maintain confidence for central bank action, whether monetary policy action or any exchange rate intervention to support the domestic currency.

Ways in which declining forex reserves impacts the investment atmosphere:

The fluctuations in foreign exchange rates first affects the country's central bank i.e. RBI. Mostly all foreign transactions are settled in US dollars and the more foreign currency a country has, the easier it is to tighten monetary policy to support the domestic economy. But during the decline in forex the central bank has to bring in institutional changes that indirectly impact the investment level in the economy.

- **Erodes investor's confidence:** Declining forex reserves erodes the confidence of the investors in the country facing fluctuations as they become cautious about their returns on investments. Thus, the declining forex reserves play a key role in foreign investment escaping from the market during the time of uncertainties.
- **Balance of Payments:** A country pays for its external obligations in foreign currencies. During the decline of forex a country might not be able to service its debt obligation and might even default on its payment creating a dent on the economy's image in international market. i.e. India's 1991 BOP crisis.
- **Import and export:** in such a scenario, a country might not be able to import sufficiently to meet

the domestic demand and after a while there might be a shortage of production of commodities in the domestic market caused due to liquidity crunch as manufacturing requires strong financial base impacting the export as well exports from a country making it much worse to accumulate foreign exchange.

- **Hinders growth and development:** Foreign investment is primarily used for stimulating a target country's economic development and create a more conducive environment for companies, the investor, and stimulates the local community and economy. It also helps create new jobs, build the country's infrastructure that can lead to an increase in income and more purchasing power to locals. But a reduction in foreign exchange impacts the atmosphere of investment which slows down the process of growth and development in a country.

Ways in which a country stabilizes the forex reserves:

- **Halt capital outflows:** RBI needs to halt the flow of capital outflows, ease norms around external commercial borrowings and introduce non -resident deposit schemes which could be helpful with currency depreciation pressures. Improving policies for the financing of local manufacturing and export of goods.
- **Expansionary Monetary policy:** In order to increase the exports from the country, RBI opts for expansionary monetary policy to infuse liquidity in the market and incentivize the businesses for production. RBI cuts on repo rates, CRR, SLR to make more money available in the market on low interest rates.
- **Settlement of international trades in Indian Rupees:** This is a major reform and has the potential to arrest Rupee depreciation in the long term as the country's demand for US dollars would decrease. However, this reform may be more attractive for trade with countries like Russia and Iran, which are facing US sanctions, thus arresting rupee depreciation.
- **Encourage Indian corporates** to raise foreign currency convertible bonds (FCCBs) and focus on improving the corporate debt market in India (a liquid CDS curve for any India corporate will give much-needed confidence to foreign investors).
- **Strategic partnerships with oil exploring sovereigns** with settlement done in Indian rupees. Additional steps like staggered payments for commodity imports and forward payment contracts (when macroeconomic conditions are favorable) can be explored. Building infrastructure and promoting the use of electric vehicles to reduced dependency on oil imports.
- **Relaxing restrictions** (with caution) on current account and capital account convertibility to allow free movement of rupee and other foreign currencies.
- **Encouraging global firms to** set up and expand workforce in India by providing them tax incentives and easing the rules on land acquisition.

Thus, the forex reserves are a crucial component of a country's economic stability. A decline in forex reserves can have a negative impact on the investment atmosphere in an economy, signaling a lack of stability. India's forex reserves have shrunk in the past few months because of the higher cost of imports, especially crude oil, combined with a sell-off in the stock markets by foreign investors. The RBI and the government has made many interventions like increasing overseas borrower limit, higher interest rate on NRI deposits to arrest the slide of Indian rupee to create an atmosphere of conductive investment in the country.

Practice Question

Q. Discuss the significance of foreign exchange reserves (Forex reserves) for an economy.

5. A MORE CONNECTED GLOBAL ECONOMY IS A DOUBLE-EDGED SWORD: WTO

Context In its annual report on the status of global trade, the World Trade Organization finds that the increasing interconnectedness of the world's economies is a double-edged sword.

Background

- Globalization is a multifaceted concept that describes the process of creating networks of connections around the world.

- It involves the interdependence of national economies and the integration of information, goods, labour and capital, to name a few.
- In recent years, globalization has been the subject of growing discontent and criticism, particularly after the COVID-19 pandemic.

WTO's take on connected world

- **Shock plus recovery:** While this globalization makes individual countries more vulnerable to short-term shocks, also allows them to recover far more quickly.
- **Better crisis management:**
- **Interconnectedness tied to stability**

Understanding 'Globalization'

- Globalization is the term used to describe the growing interdependence of the world's economies, cultures, and populations, brought about by cross-border trade in goods and services, technology, and flows of investment, people, and information.

India and Globalization

- The wake of globalization was first felt in the 1990s in India when the then finance minister, Dr Manmohan Singh initiated the economic liberalization plan.
- The new policy was called as **Liberalization, Privatization and Globalization Policy (LPG Policy)** or the **New Economic Policy, 1991.**
- Since then, India has gradually become one of the economic giants in the world.

Components of Globalization

There are three major components of globalization: economic, social and political.

- **Economic globalization**
- **Social globalization**
- **Political globalization**

The changing globalization

- Globalization itself is evolving, with changes in global trade flows, capital flows, and the **Fourth Industrial Revolution.**
- **More trade flow**
- **Increasing trade in services**
- **Technology:** Technology has become a bigger force of globalization, changing cross-border mobility of goods and services, and capital flows.
- New technological revolution has huge spillovers and externalities.
- **Digitalization**

Challenges faced by India

- Demographic dividend
- Rapid technological change
- Technological gap and barrier
- Digital divide
- Socio-economic inequality
- Accessibility and affordability constraints

Positive sides of globalization	Negative side of globalization
• Competitive Markets • Growing Economies of developing countries • Diversified workforce • Better Future to skilled manpower • Better Products and services • Sharing of technology and knowledge • Cultural and heritage exchange	• Easy spread of vulnerabilities • Occurrence of a catastrophe can affect the whole world. • Confusing local system • Exploitation of manpower • Immigration challenges • Affected culture and language • Rapid urbanization

Practice Question

Q. Discuss the benefits of increased global economic interconnectedness, such as expanded market opportunities, enhanced efficiency, and technological advancements, in the context of Indian economy.

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11

ECONOMIC SECTORS

1. RURAL TOURISM

Context Amid a global demand for experiential tourism, India is structuring its plan to attract tourists to villages, for an immersive escape into the culture of rural India, while boosting employment and promoting sustainability.

Heritage tourism in India

> According to the United Nations World Tourism Organization (UNWTO), "rural tourism" is a type of tourism activity in which the visitor's experience is related to a wide range of products generally linked to nature-based activities, rural culture, and sightseeing.

- Heritage tourism is defined as **"travel undertaken to explore and experience places, activities, and artefacts that authentically represent the stories and people of the past and present".**
- It is oriented toward cultural heritage of the tourist location.
- It involves visiting historical or industrial sites, religious travel or pilgrimages.
- India is well known for its rich heritage and ancient culture.
- The country's rich heritage is amply reflected in the various temples, majestic forts, pleasure gardens, religious monuments, museums, art galleries and urban and rural sites which are citadels of civilization.
- All these structures form the products of heritage tourism.

What is the plan?

- The **Central Nodal Agency – Rural Tourism and Rural Homestays (CNA – RT and RH) is** the coordinating body amongst Centre, States, and other stakeholders.
- It has identified six niche experiences for tourists wanting to visit rural India, including
  - agritourism
  - art and culture
  - ecotourism
  - wildlife
  - tribal tourism
  - homestays
- More than 134 villages have been listed, each of which provides a set of unique experiences to tourists. The list will only grow.

How is Tourism important for nation's economy?

- **Generating Income and Employment:** Tourism in India has emerged as an instrument of income, employment generation, poverty alleviation and sustainable human development.
- **Source of Foreign Exchange Earnings**: Tourism is an important source of foreign exchange earnings in India. This has favourable impact on the balance of payment of the country.
- **Preservation of National Heritage and Environment**: Tourism helps preserve several places which are of historical importance by declaring them as heritage sites.

  - **For instance**, the Taj Mahal, the Qutab Minar, Ajanta and Ellora temples, etc, would have been decayed and destroyed had it not been for the efforts taken by Tourism Department to preserve them.
- **Developing Infrastructure:** Tourism tends to encourage the development of multiple-use infrastructure that benefits the host community, including various means of transports, health care facilities and the hotels and high-end restaurants that cater to foreign visitors.
- **Promoting Peace and Stability**: Tourism industry can also help promote peace and stability in developing country like India by providing jobs, generating income, diversifying the economy, protecting the environment, and promoting cross-cultural awareness.

What are the challenges in rural tourism Industry of India?

- Lack of Proper Infrastructure
  - Access and Connectivity
  - Amenities
  - Human Resource
  - Marketing and Promotion
  - Security issues

The travel industry is expected to reach $250 billion in India by 2030 and the path to that must take from the learnings of the past years. The **National Conference of State Tourism Ministers** held in Dharamshala in September 2022 affirmed through the Dharamshala Declaration' its commitment to developing **"sustainable and responsible and inclusive tourism."** It pledged to embody the philosophy of **'Ek Bharat Shrestha Bharat'** that would encourage more Indians to travel to the hinterlands and experience the nature and culture of rural India.

Practice Question

Q. Define rural tourism and highlight its significance in generating economic opportunities, preserving cultural heritage, and promoting rural development.

2. TRANSFORMATION IN INDIAN TELECOM INDUSTRY

Context Industry 4.0 is transforming the way businesses operate across various sectors. The telecommunications industry, in particular, is experiencing a major shift as it adopts new technologies such as the **Internet of Things (IoT), Artificial Intelligence (AI), and Machine Learning (ML)** to improve efficiency, customer experience, and service delivery.

Evolution of Telecom Sector in India

- Indian telecom sector is more than 165 years old.
- Telecommunications was first introduced in India in 1851 when the first operational land lines were laid by the government near Kolkata (then Calcutta).
- Although telephone services were formally introduced in India much later in 1881.
- The Indian telecom sector was entirely under government ownership until 1984
- The actual evolution of the industry started after the separation of the **Department of Post and Telegraph in 1985** by setting up the **Department of Posts** and the **Department of Telecommunications (DoT).**

Current status of the Sector

- India is currently the **world's second-largest telecommunications market** and has registered strong growth in the past decade and half with a **subscriber base of 1.20 billion.**
- The liberal and reformist policies of the Government of India have been instrumental along with strong consumer demand in the rapid growth in the Indian telecom sector where key policies are enhancing the use of internet in various sector leading to growth of telecom sector, like:
  - National optical fibre mission
  - National digital communication policy 2018
  - PM-WANI scheme

FDI IN TELECOM SECTOR

- In October 2021, the government notified 100% foreign direct investment (FDI) via the automatic route from the previous 49% in the telecommunications sector.
- FDI of up to 100% is permitted for infrastructure providers offering dark fibre, electronic mail and voice mail.
- The Telecom sector is the 3rd largest sector in terms of FDI inflows, contributing 7.1% of total FDI inflow in India.

What are the challenges faced by the sector?

- Poor Financial Health of the Sector
- Limited Spectrum Availability
- Higher cost of Spectrum auction
- High competition and tariff war
- Lack of Telecom Infrastructure in Semi-rural and Rural areas
- Government policies against this sector
- Low Broadband Penetration
- Newer technologies decrease the revenue
- License fee

Forward looking

- As a next step, like other countries, DoT would need to strongly consider allowing Cloud, Voice **Services and Software-Defined Wide Area Network (SD-WAN)** over the internet, by avoiding data forwarding technologies such as MPLS, exempting CDR storage in India, and allowing **Voice over Internet Protocol (VoIP).**
  - This will help organisations be cost-effective, agile, and focus on providing better products and services with superior customer experience.
- Going forward, the latest technologies like 'Internet via satellite' will drastically increase internet penetration to the remotest locations in the country.
- This is expected to further propel digitisation efforts, with many rural and remote users gaining access to the World Wide Web.

Practice Question

Q. Discuss the significant transformations in the Indian telecom industry and their impact on the economy. Analyze the challenges and opportunities associated with these transformations.

3. FOOD PROCESSING SECTOR

Context: MoFPI is implementing **Pradhan Mantri Kisan SAMPADA Yojana (PMKSY), Production Linked Incentive Scheme for Food Processing Industry (PLISFPI) and centrally sponsored PM Formalization of Micro Food Processing Enterprises (PMFME) Scheme** to increase the level of food- processing industry and encouraging rural entrepreneurship across the country including rural areas.

About food processing Industry:

Food processing, any of a variety of operations by which raw foodstuffs are made suitable for consumption, cooking, or storage. Food processing generally includes the basic preparation of foods, the alteration of a food product into another form (as in making preserves from fruit), and preservation and packaging techniques.

India's food processing sector is a 'Sunrise Sector' that has gained prominence in recent years. It is one of the largest in the world and its output is expected to reach $535 bn by 2025-26. Major sectors constituting the food processing industry in India are grains, sugar, edible oils, beverages, and dairy products.

Status of Food processing industry in India: (infographic)

- The food processing industry has a share of 12.38% in the employment generated in all Registered Factory sector engaging approximately 1.93 Mn people.
- Unregistered food processing sector supports employment to 5.1 Mn workers as per the NSSO 73rd Round report.

- The industry has encountered a growth rate of around 11% in the recent past.
- India is ranked first in the production of milk, pulses and jute second in fruits and vegetables and third in production of cereals.

Significance of food processing industry

- **Essential part of the agriculture value chain:** The sector provides assured markets for agriculture commodities linking the upward and downward supply chains. Market of processed food is less volatile than raw commodities as well.
- **Very high export potential of the industry:** India has achieved $50bn agriculture export in FY 2021-22 but it is currently dominated by raw materials and rice etc. Food processing sector can help diversify Indian farm exports basket and reach newer markets. India can take lead in horticulture, marine and dairy products among others.
- **Rising demand of processed food across the globe:** Rise in disposable income of consumers coupled with increasing demand for processed food like ready-to-eat cereals, canned food etc. provides additional opportunity to farmers.
- **Incorporation of technology:** The sector incorporates various technologies like food irradiation that increase the shelf life of commodities, especially horticulture, thus helping the commodities reach farther markets.
- **Link with the retail chains:** Online grocery retail in India has seen a CAGR of over 50% and projected to grow to $10 bn to 12 bn by 2025.

Initiatives taken by government:

- **Pradhan Mantri Kisan Sampada Yojana (PMKSY)**: aims at developing modern food processing infrastructure. PMKSY has been envisaged as a comprehensive package which will result in creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet.
- **Pradhan Mantri Formalisation of Micro Food Processing Enterprises Scheme (PMFME):** aims to enhance existing individual micro-enterprises in the unorganized segment of the food processing industry.
- **Production Linked Incentive Scheme for Food Processing Industry (PLISFPI)**: aims to boost domestic manufacturing, increase exports, while supporting food manufacturing entities with stipulated Sales and willing to make investment for expansion of processing capacity and branding abroad to incentivize emergence of strong Indian brands. The scheme is EoI bases.
- **Other steps:** Kisan Rails, 100% FDI in food processing sector etc.

Impact of the policies on the sector

- The sector has been recording CAGR of more than 10% for the last few years on the back of policy support from the government.
- The exports of agricultural and processed food products rose by 13% in the nine months (April-December) of the current Financial Year 2022-23 in comparison to the corresponding period of FY 2021-22.
- The total FDI received in the food processing sector from April 2000 till December 2022 was $11.79 Bn. The FDI equity inflow in the Food Processing

Agencies responsible for India's food processing sector:

- **Ministry of Food Processing Industries (MoFPI):** The central government agency is responsible for formulating and implementing policies and programs to promote the food processing sector. It focuses on infrastructure development, capacity building, investment promotion, and the creation of a favorable business environment for the industry.
- **Food Safety and Standards Authority of India (FSSAI):** FSSAI is an autonomous body under the Ministry of Health and Family Welfare. It is responsible for setting food safety and quality standards, regulating food manufacturing, processing, storage, and distribution, and ensuring compliance with relevant regulations and guidelines.
- **Agricultural and Processed Food Products Export Development Authority (APEDA):** Operating under the Ministry of Commerce and Industry, ut focuses on the export promotion and development of agricultural and processed food products. APEDA facilitates market access, quality assurance, and provides support services to enhance India's exports in the sector.
- **National Bank for Agriculture and Rural Development (NABARD):** NABARD is a development finance institution that provides credit, grants, and financial assistance to promote agriculture and rural development. It plays a significant role in providing financial support to the food processing sector through loans, subsidies, and schemes.

Sector for the period of April 2021- March 2022 was US$ 709.72 Million. The total FDI equity inflow in sector from April 2000 to December 2022 is $ 11.79 Bn.

- By 2025 the Indian Food Processing market is estimated to reach USD 535 billion and growing at a compound annual growth rate of 15.2%. Tier-II and Tier-III cities could mirror the trend visible in metropolitan areas, by consuming more processed food in the coming years.

A dynamic food processing sector plays a vital role in reduction in the wastage of perishable agricultural produce, enhancing shelf of food products, ensuring value addition to agricultural produce, and diversification of agriculture. But currently, the sector is largely unorganized and informal. Further steps like investments in the retail chains, agri-logistics, rural connectivity, skilling etc. should be taken to unlock the full potential of the sector.

Practice Question

Q. Evaluate the potential and challenges of the food processing industry in India as a catalyst for agricultural transformation and economic growth.

PYQ:

Q. Elaborate on the policy taken by Government of India to meet the challenges of the food processing sector. (2019)

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12

INVESTMENT MODELS

1. PUBLIC PRIVATE PARTNERSHIP (PPP)

Syllabus Map: PPP- an investment model/Investment models followed by India.

Context: With the aim is to boost private sector participation in improving the State's infrastructure government to formulate a detailed public private partnership policy.

About Public Private Partnership:

Public-private partnerships involve collaboration between a government agency and private-sector companies that can be used to finance, build, and operate projects, such as public transportation networks, parks, and convention centers. Financing a project through a public-private partnership can allow a project to be completed sooner or make it a possibility in the first place.

What makes PPP attractive for the private players?

Public-private partnerships often involve concessions of tax or other operating revenue, protection from liability, or partial ownership rights over nominally public services and property to private sector, for-profit entities.

Motivation for governments to Engage in PPPs:

The three main needs that motivate governments to enter into PPPs for infrastructure are:

- to attract private capital investment (often to either supplement public resources or release
- them for other public needs)
- to increase efficiency and use available resources more effectively
- to reform sectors through a reallocation of roles, incentives, and accountability

Role of PPP In order to meet financing needs of projects:

- PPPs generally spread the costs of procuring an asset over time and/or cause the associated capital expenditure to affect private firms; rather than the public sectors balance sheets. These objectives may be achieved by basing the procurement on the public services required—that is, upon outputs—rather than on the underlying assets, or inputs. Where public sector capital budgets are constrained, there are obvious advantages in adopting a PPP to deliver public services that might otherwise be unaffordable to a government.
- At the heart of all PPPs is the deployment of private sector capital. Within a PPP framework, this can result in greatly improved value for money for the government in terms of the risks transferred to the private sector (in cases where the latter is better able to assess the risks) and powerful private sector incentives for the long-term delivery of reliable public services. These benefits are sufficient to ensure that PPPs often become the favored means of procurement, even where public sector capital constraints do not apply. In many countries, such as India, therefore, the motivation for making greater use of PPPs is to obtain increased value for money in the procurement of public services.
- PPPs operate at the boundary of the public and private sectors, being neither nationalized nor privatized assets and services. Thus, politically, they represent a third way in which governments may deliver some

public services. Moreover, in a practical sense, PPPs represent a form of collaboration under contract by which public and private sectors, acting together, can achieve what each acting alone cannot.

- Extracting long-term value-for-money through appropriate risk transfer to the private sector over the life of the project – from design/ construction to operations/ maintenance.
- Creating persification in the economy by making the country more competitive in terms of its facilitating infrastructure base as well as giving a boost to its business and industry associated with infrastructure development (such as construction, equipment, support services.
- Utilizing PPPs as a way of developing local private sector capabilities and infrastructure simultaneously through joint ventures with large international firms, as well as sub-contracting opportunities for local firms in areas such as civil works, electrical works, facilities management, security services, cleaning services, maintenance services.

Risks of relying on PPP:

- Development, bidding and ongoing costs in PPP projects are likely to be greater than for traditional government procurement processes - the government should therefore determine whether the greater costs involved are justified.
- There is a cost attached to debt – While private sector can make it easier to get finance, finance will only be available where the operating cash flows of the project company are expected to provide a return on investment.
- Some projects may be easier to finance than others (if there is proven technology involved and/ or the extent of the private sectors obligations and liability is clearly identifiable), some projects will generate revenue in local currency only (e.g water projects).
- Private sector will do what it is paid to do and no more than that – therefore incentives and performance requirements need to be clearly set out in the contract.
- Government responsibility continues – citizens will continue to hold government accountable for quality of utility services. Government will also need to retain sufficient expertise, whether the implementing agency and/ or via a regulatory body, to be able to understand the PPP arrangements.
- There is no unlimited risk bearing – private firms (and their lenders) will be cautious about accepting major risks beyond their control, such as exchange rate risks/risk of existing assets. If they bear these risks then their price for the service will reflect this.

Mitigating the risks associated with PPP:

- A clear legal and regulatory framework is crucial to achieving a sustainable solution (for more, go to legislation and regulation).
- Government needs to retain sufficient expertise, whether the implementing agency and/ or via a regulatory body, to be able to understand the PPP arrangements, to carry out its own obligations under the PPP agreement and to monitor performance of the private sector and enforce its obligations.
- The government should see PPP in the light of supplementing the public sector capacities to meet the growing demand of infrastructure development rather than the key provider.

Investment-led growth is central to the economic agenda of the Government in any country. One of the prerequisites of such growth is capital and asset recycling. In this context, asset recycling and monetization hold the key to value-creation in infrastructure, by unlocking value from public investment and tapping into private-sector efficiencies for delivering infrastructure. Hence government has launched various initiatives such as **National Monetization pipeline** to unlock the value of investment in public assets for future developments while tapping into private-sector financing and efficiencies for delivering infrastructure services.

Practice Question

Q. Examine the recent measures taken by the government to promote Public Private Partnership (PPPs) in India.

PYQ:

Q. Investment in infrastructure is essential for more rapid and inclusive economic growth. Discuss in the light of India's experience.

- **Q. Explain the meaning of investment in an economy in terms of capital formation. Discuss the factors to be considered while designing a concessional agreement between a private and a public entity. (2020)**
- **Q. Examine the development of airports in India through joint ventures under the public private partnership (PPP) MODEL. Analyse the measures proposed I the budget 2017-2018 to achieve the objective. (2017)**
- **Q. Explain how public private partnership agreements, in longer gestation infrastructure projects, can transfer unsuitable liabilities to the future. What arrangements need to be put in place to ensure successive generations, capacities are not compromised? (2014)**
- **Q. Adoption of the PPP model for infrastructure development of the country has not been free of criticsm. Critically discuss the pros and cons of the model.(2013)**

2. LIC IPO

Context It has been one year since the Life Insurance Corporation of India (LIC) shares were listed on domestic stock exchanges after the completion of its ₽21,000 crore worth initial public offering (IPO), the country's largest IPO.

Background

- The government, which owned 100 percent stake in the company, offered 31.62 crore equity shares or a 5 percent stake in the IPO.
- However, the listing of India's largest IPO was jinxed as the stock debuted at an 8% discount and has never seen that IPO price since then. LIC share price has fallen around 35% from the listing price and 40% from the upper band of the IPO price.

Initial public offering (IPO)
- Initial public offering is the process by which a private company can go public by sale of its stocks to general public.

Reasons behind IPO

- Meeting the disinvestment targets of the government
- Financing the capital expenditure of the government, has been estimated value of Rs 39 lakh crore.
- Attracting foreign investors and foreign currency inflow.
- The government needs the proceeds of disinvestment to fund the infrastructure projects and other expenses that have built up due to the costs of the pandemic

Impact on LIC's structure

- The government used to be a 100 percent owner, now it will be a 95 percent owner. This doesn't change anything.
- The management is still be chosen by the government.

What are the pros and cons of the LIC IPO?

Pros	Cons
Reducing the fiscal burden on the exchequer Improving public finances Encouraging private ownership Funding growth and development programs Maintaining and promoting competition in the market Structural change in the administration Better transparency and accountability	Undermining investors Failed arguments Focus on increasing profits Loss for small and marginal players Effect on social objective No policies for expansion in unprofitable regions

Practice Question
- **Q. Explain the concept of Initial Public Offering (IPO) and its significance in the capital market and corporate finance.**

3. OIL-PROOFING INDIA'S ECONOMY

Context An RBI working paper has laid emphasis on the need to **oil-proof India's economy** with a government policy that promotes energy security and sustainability as extreme changes in global crude oil price are transmitted to sectoral indices of the Indian stock markets.

Background

- The rates of petroleum products are quite high in India and cannot be reduced due to the interest payments that the Indian Government has to do on **Oil Bonds** issued by the **Manmohan Singh regime.**
- Oil bonds were issued by the government between 2005 and 2010 to insulate consumers from price shocks.
- They are issued by the government to compensate oil marketing companies for not passing on the higher costs to consumers.

Oil bonds are issued by the government to compensate **oil marketing companies (OMCs)** to offset losses that they suffer to shield consumers from rising crude oil prices.

Why were the Oil Bonds issued?

- To insulate the consumers from rising prices of petroleum products and to avoid the ballooning of government's **fiscal deficit.**
- As the government of the time wanted to avoid **burdening the consumers** to pay the whole amount, they directed the **Oil Marketing Companies (OMCs)** to sell the petroleum products at cheaper rates (controlled price).
- However, compensating the OMCs for the difference in value between the actual price and the retail price of petroleum products was necessary from the point of view of their **financial viability.**

What would have been done instead of oil bonds?

- Ideally in the above situation, it must have been the government of the time who should have paid for the difference in price but that would have increased the **fiscal deficit** of government and thus constraint it from undertaking welfare measures.
- It has to be also remembered that the global recession came about in **2008** causing economic slowdown all around the world including India.
- The priority of Indian Government therefore at this time was to utilise its limited fiscal resources for the purpose boosting economic activities in the country.
- An alternative path therefore was taken up by the Manmohan Singh government under which Oil Bonds were issued to the OMCs.
- It is prudent to remember that, in essence, these bonds are like **promissory notes** of deferred payment of subsidies that the government owes to oil marketing companies.
- Since the government did not subsidise these companies upfront, these payouts did not show up in budget documents, until the repayment of the principal or interest components took place.
- As a result petroleum products were made available to the people of India without increase seen in the fiscal deficit at that point of time and OMCs being saved from dreadful under-recoveries.

What are the other factors causing high price of petroleum products in India?

- **Dependency on imports**; increased price level in international markets leading to increase in oil price in domestic market.
- **Deregulation Policy:** It means that the retail price of fuel in India will be dictated by their actual price in the market with government providing very little to no subsidy.
- **Ukraine war** has let to economic sanctions been applied on Russia, who is one of the major exporters of hydrocarbon globally, causing the skyrocketing of fuel prices.

What are the effects of high fuel prices on Indian Economy?

- Petroleum products are non-substitutable imports and not buying them is out of question. Their high prices though severely impact the economy of India as a whole.
- Inflation in their cost leads to upswing of the input price of nearly all items of consumption and use.

- These leads to downfall of savings of the people of the country and that in turn negatively effects the capital available for investment in India.

Practice Question

Q. Analyze the impact of oil price fluctuations on key macroeconomic indicators, such as GDP growth, fiscal deficit, current account balance, and inflation.

4. ECONOMIC SURVEY 2022-23: INDIAN STARTUP ECOSYSTEM & CHALLENGES

Context The Indian startup ecosystem is facing several challenges despite recording an increase in the number of startups to 84,012 in 2022 from 452 in 2016, according to the Economic Survey Report 2022-23.

What is a Start-up?

- The term start-up refers to a company in the first stages of operations.
- Start-ups are founded by one or more entrepreneurs who want to develop a product or service for which they believe there is demand.

Venture Capitalist: is a private equity investor that provides capital to companies with high growth potential in exchange for an equity stake.

- These companies generally start with high costs and limited revenue, which is why they look for capital from a variety of sources such as venture capitalists.
- A Start-up with valuation of $ 1 Billion is termed as Unicorn.

Why is India seeing the rise of start-ups?

- India's demographic dividend has blessed it with population of such age group that
- Government initiatives such as start-up India, stand-up India etc.
- Availability of investors, both foreign and domestic,
- Increasing demand of products and services
- Telecom and IT revolution in India has made getting access to new products and services

How can Start-ups help the Indian Economy?	Why start-ups are not a complete panacea to India's economic woos?
• Opportunity to the entrepreneurial youth their finances exponentially. • Wealth creation • Growth in employment opportunities. • Creation of products or services • solving a regional or local issue or catering to a local demand • creation of economic opportunities • Reducing regional disparity in economy	• Statistically, a large number of start-ups do not make it big and are shut down. • Risk of failure and loss of investment • Employment opportunities in start-ups, are not proportionate to their valuation. • Disparities in the salary and working conditions • Resource utilization are not at optimal level • Minimal legal provisions and legal safeguards for investors and workforce • Demand supply mismatch of skilled labour force

Challenges faced by Start-ups

- The challenges include funding, revenue generation struggles and lack of access to supportive infrastructure.
- The regulatory environment and tax structures have also posed hurdles for startups.
- To circumvent these challenges, many Indian companies are **setting up bases overseas**, especially in countries with favourable legal environments and taxation policies,

Flipping

- The process of transferring the entire ownership of an Indian company to an overseas entity, including the transfer of all Intellectual Property and data owned by the Indian company, is called 'flipping'.
- Typically, flipping happens at the early stage of the startup. However, this trend can be reversed with active collaboration with the government-related regulatory bodies and other stakeholders. Further, companies are also exploring 'reverse flipping'.

Practice Question

Q. Provide an overview of the Indian startup ecosystem, highlighting its growth, innovation, and contributions to the economy.

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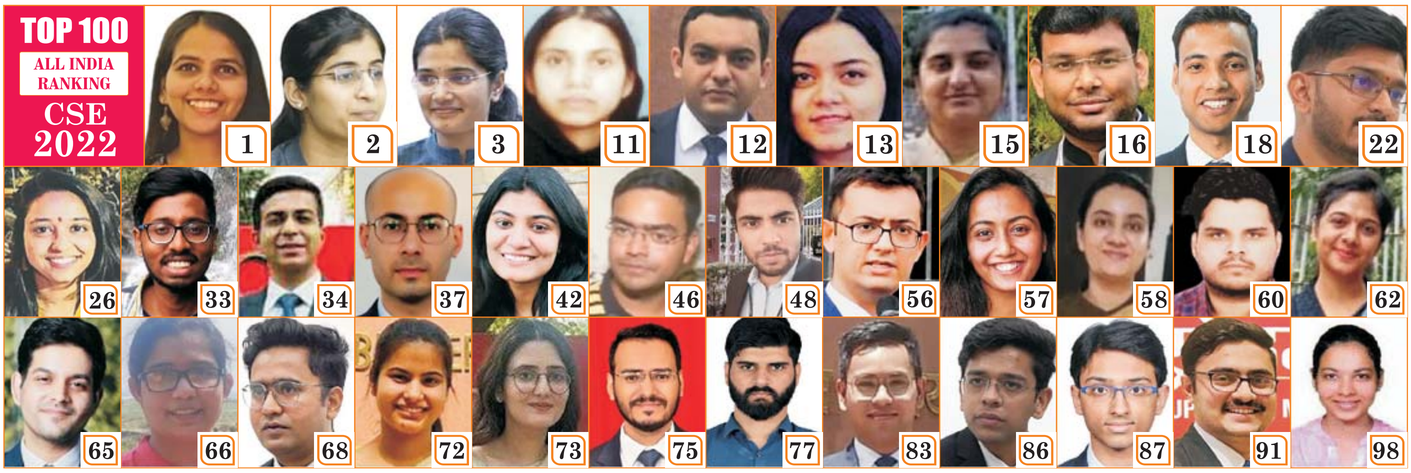

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