CIVIL SERVICES EXAMINATION
focus
RAU'S HOUSE JOURNAL

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EXHAUSTIVE CURATION using SPICE Approach

IN DEPTH ANALYSIS

LUCID presentation for SPEEDY REVISION

MAINS COMPASS 2021

Rau's IAS Study Circle
Since 1953

ECONOMIC DEVELOPMENT

PREFACE

Dear Aspirants,

Indian Economy is one of the most dynamic sections/subjects from the perspective of UPSC Mains Exam. Its syllabus covers a wide variety of topics and needs good understanding of basics as well.

We, at Rau's IAS, understand this problem and hence, we have prepared Economy Mains Compass which delivers EXAM CENTRIC, ISSUE BASED COMPREHENSIVE ANALYSIS which is can be used by aspirants to answer any question on that topic after adjusting the requirement of the question tag.

We have also tried to maintain high level of preciseness/brevity in the content by focusing on point wise approach and covering all dimensions of the topic in one place. This will help you go through the content very fast, and it will be very easy for you to revise everything multiple time before you take the actual examination.

We strongly recommend that you use the Mains Compass of Economy in tandem with Mains QIP and Mains Test Series of Rau's IAS. This will help you to unleash the full potential of this course and we assure you that you will score your best in the mains exam.

All the best!!!

Rau's IAS Team

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Syllabus Economic Development

- Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.
- Inclusive growth and issues arising from it.
- Government Budgeting.
- Major crops-cropping patterns in various parts of the country, - different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.
- Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System objectives, functioning, limitations, revamping; issues of buffer stocks and food security; Technology missions; economics of animal-rearing.
- Food processing and related industries in India- scope' and significance, location, upstream and downstream requirements, supply chain management.
- Land reforms in India.
- Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.
- Infrastructure: Energy, Ports, Roads, Airports, Railways etc.
- Investment models.

Previous Year Questions and Theme Map

THEME- INCLUSIVE GROWTH			
SUB- THEME	**YEAR**	**QUESTION**	**IMPORTANT THEMES 2020**
Inclusive Growth	2013	With a consideration towards the strategy of inclusive growth, the new companies bill, 2013 has indirectly made CSR a mandatory obligation. Discuss the challenges expected in its implementation in right earnest. Also discuss other provisions in the bill and their implications.	• Challenges of Inclusive Growth • Universal Basic Income • Reaping Demographic Dividend • Gig Economy • Ethical wealth creation • Financial Inclusion: Constraints and Challenges • Need for boosting Innovation • Poverty Line Estimates • Unemployment in India- Reasons and Solutions • Informalisation of Indian Workforce • Social Impact Bonds- Prospects in India • India's performance on SDGs
	2014	Capitalism has guided the world economy to unprecedented prosperity. However, it often encourages short-sightedness and contributes to wide disparities between the rich and the poor. In this light, would it be correct to believe and adopt capitalism driving inclusive growth in India? Discuss.	
		While we found India's demographic dividend, we ignore the dropping rates of employability. What are we missing while doing so? Where will the jobs that India desperately needs come from? Explain.	
	2015	The nature of economic growth in India in described as jobless growth. Do you agree with this view? Give arguments in favour of your answer.	
	2016	Comment on the challenges for inclusive growth which include careless and useless manpower in the Indian context. Suggest measures to be taken for facing these challenges.	
	2017	What are the salient features of 'inclusive growth'? Has India been experiencing such a growth process? Analyze and suggest measures for inclusive growth.	
		Account for the failure of manufacturing sector in achieving the goal of labour-intensive exports rather than capital-intensive exports. Suggest measures for more labour-intensive rather than capital-intensive exports.	
		Among several factors for India's potential growth, savings rate is the most effective one. Do you	

		agree? What are the other factors available for growth potential?	
	2019	Do you agree with the view that steady GDP growth and low inflation have left the Indian economy in good shape? Give reasons in support of your arguments.	
		It is argued that the strategy of inclusive growth is intended to meet the objectives of inclusiveness and sustainability together. Comment on this statement.	
	2020	Explain intra-generational and inter-generational issues of equity from the perspective of inclusive growth and sustainable development.	
		Define potential GDP and explain its determinants. What are the factors that have been inhibiting India from realising its potential GDP?	
		Explain the meaning of investment in an economy in terms of capital formation. Discuss the factors to be considered while designing a concession agreement between a public entity and a private entity.	
Government Schemes	2015	"Success of 'Make in India' programme depends on the success of 'Skill India' programme and radical labour reforms." Discuss with logical arguments.	
		Craze for gold in Indians have led to a surge in import of gold in recent years and put pressure on balance of payments and external value of rupee. In view of this, examine the merits of Gold Monetization Scheme.	• FAME 2.0- Electric Mobility- Need, Prospects, Challenges and Way Forward • Issues and Challenges: PMFBY, PM-AASHA, PM-KISAN, e-NAM • Problems with UDAY Scheme
	2016	Pradhan Mantri Jan-Dhan Yojana (PMJDY) is necessary for bringing unbanked to the institutional finance fold. Do you agree with this for financial inclusion of the poorer section of the Indian society? Give arguments to justify your opinion.	
		What are 'Smart Cities? Examine their relevance for urban development in India. Will it increase rural-urban differences? Give arguments for Smart Villages' in the light of PURA and RURBAN Mission.	
Planning and Mobilisation of Resources	2018	How are the principles followed by the NITI Aayog different from those followed by the erstwhile Planning Commission in India?	• External Benchmarking of Loans • NPA Problem- Genesis, Issues and Challenges • Idea of Bad Bank

			• Corporate Bond Market in India • ESG Investment • Reforms in governance of PSBs • Merger of Banks- Benefits and Challenges • Crisis in NBFCs- Genesis, Challenges and Solutions • Finance Commission Vs. NITI Aayog

THEME- BUDGETING AND TAXATION			
SUB- THEME	**YEAR**	**QUESTION**	**THEMES 2020**
Budgeting	2013	What are the reasons for introduction of Fiscal responsibility and Budget Management (FRBM) act, 2003? Discuss critically its salient features and their effectiveness.	• Off Budget Financing- Concerns and Challenges, CAG's Recommendations • Fiscal Council in India – Need and Benefits. • Strengthening Fiscal Federalism • Disinvestment Policy in India • Finance Commission Recommendations
		What is meaning of the term tax-expenditure? Taking housing sector as an example, discuss how it influences budgetary policies of the government.	
	2015	In what way could replacement of price subsidy with Direct Benefit Transfer (DBT) change the scenario of subsidies in India? Discuss.	
	2016	Women empowerment in India needs gender budgeting. What are the requirements and status of gender budgeting in the Indian context?	
	2017	One of the intended objectives of Union Budget 2017-18 is to 'transform, energize and clean India'. Analyse the measures proposed in the Budget 2017-18 to achieve the objective.	
	2019	The public expenditure management is a challenge to the government of India in the context of budget making during the post-liberalization period. Clarify it.	
	2018	Comment on the important changes introduced in respect of the Long-term Capital Gains Tax (LCGT) and Dividend Distribution Tax (DDT) in the Union Budget for 2018-2019.	• Challenges in the implementation of GST • Equalisation levy • Concerns over digital Taxation

Taxation	2019	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.	
	2020	Explain the rationale behind the Goods and Services Tax (Compensation to States) Act of 2017. How was COVID-19 impacted the GST compensation fund and created new federal tensions?	

THEME- AGRICULTURE AND ALLIED SECTORS

SUB- THEME	YEAR	QUESTION	IMPORTANT THEMES 2020
Cropping Pattern	2016	Given the vulnerability of Indian agriculture to vagaries of nature, discuss the need for crop insurance and bring out the salient features of the Pradhan Mantri Fasal Bima Yojana (PMFBY)	• Reducing Water use through changes in Cropping Pattern • Zero Budget Natural Farming • Agricultural Diversification • Millets/Nutri-cereals • Pulses • Oilseeds • Horticulture Sector- Golden Revolution
		What is allelopathy? Discuss its role in major cropping systems of irrigated agriculture.	
	2017	What are the major reasons for declining rice and wheat yield in the cropping system? How crop diversification is helpful to stabilize the yield of the crop in the system?	
	2018	How has the emphasis on certain crops brought about changes in cropping patterns in recent past? Elaborate the emphasis on millets production and consumption.	
		Assess the role of National Horticulture Mission (NHM) in boosting the production, productivity and income of horticulture farms. How far has it succeeded in increasing the income of farmers?	
		Sikkim is the first 'Organic State' in India. What are the ecological and non-economical benefits of Organic State?	
	2019	How far is Integrated Farming System (IFS) helpful in sustaining agricultural production?	
	2020	What are the major factors responsible for making rice-wheat system a success? In spite of the success how has this system become	

		bane in India?	
Subsidies and MSP	2013	What are the different types of agriculture subsidies given to farmers at the national and state levels? Critically analyze the agriculture subsidy regime with the reference to the distortions created by it.	• Farm loan waivers- Problems and Alternatives • Agricultural Credit- Issues and Challenges • Doubling farmers' income- Dalwai Panel Recommendations
	2014	"In the villages itself no form of credit organisation will be suitable except the cooperative society." – All Indian rural credit survey. Discuss this statement in the background of agriculture finance in India. What constrain and challenges do financial institutions supplying agricultural finances? How can technology be used to better reach and serve rural clients?	
	2017	How do subsidies affect the cropping pattern, crop diversity and economy of farmers? What is the significance of crop insurance, minimum support price and food processing for small and marginal farmers?	
	2018	What do you mean by Minimum Support Price (MSP)? How will MSP rescue the farmers from the low income trap?	
Irrigation	2016	What is water-use efficiency? Describe the role of micro-irrigation in increasing the water-use efficiency.	
	2019	Elaborate the impact of National Watershed Project in increasing agricultural production from water-stressed areas.	
	2020	Suggest measures to improve water storage and irrigation system to make its judicious use under depleting scenario.	
Technology missions	2015	How can the 'Digital India' programme help farmers to improve farm productivity and income? What steps has the Government taken in this regards?	
Economics of animal rearing	2013	India needs to strengthen measures to promote the pink revolution in food industry for better nutrition and health. Critically elucidate the statement.	• Allied Sectors of Agriculture- Livestock rearing, Dairy farming, Horticulture etc.- Opportunities and Challenges • Sericulture- Opportunities and Challenges
	2015	Livestock rearing has a big potential for providing non-farm employment and income in rural areas. Discuss suggesting suitable	

		measures to promote this sectors in India	• Need to Boost Secondary Agriculture
Marketing of agricultural produce	2014	There is also a point of view that agriculture produce market committees (APMCs) set up under the state acts have not only impeded the development of agriculture but also have been the cause of food inflation in India. Critically examine.	• Agricultural Marketing Reforms- Launch of Ease of doing Agri-Business and E-NAM • Agricultural Export Policy- Prospects, Challenges and Way forward • Farmer producer companies- Prospects, Challenges and Suggestions • Critical Analysis of the 3 Farm Acts • National Agricultural Market (e-NAM): Benefits and Challenges • PM-AASHA Scheme: Challenges and Concerns • MSP Regime: Flaws/ Limitations and Way Forward
	2015	In view of the declining average size of land holdings in India which has made agriculture non-viable for a majority of farmers, should **contract farming** and land leasing be promoted in agriculture? Critically evaluate the pros and cons.	
	2020	What are the main constraints in transport and marketing of agricultural produce in India?	

THEME- FOOD PROCESSING INDUSTRIES

SUB- THEME	YEAR	QUESTION	IMPORTANT THEMES 2020
Food Processing Industries	2015	What are the impediments in marketing and supply chain management in industry in India? Can e-commerce help in overcoming these bottlenecks?	Food Processing Industries- Growth Drivers, Opportunities and Challenges
	2017	What are the reasons for poor acceptance of cost effective small processing unit? How the food processing unit will be helpful to uplift the socio-economic status of poor farmers?	
	2018	Examine the role of supermarkets in supply chain management of fruits, vegetables and food items. How do they eliminate number of intermediaries?	
	2020	What are the challenges and opportunities of food processing sector in the country? How can income of the farmers be substantially increased by encouraging food processing?	

THEME- FOOD SECURITY AND PDS

SUB- THEME	YEAR	QUESTION	IMPORTANT THEMES 2020
Food Security	2013	Food security bill is expected to eliminate hunger and malnutrition in India. Critically discuss various apprehensions in its effective implementation along with the concerns it has generated in WTO	• PDS Reforms- Nilekani Panel • Increase in Food Subsidy Bill • Flaws in the Open-Ended

	2017	Explain various types of revolutions, took place in Agriculture after Independence in India. How these revolutions have helped in poverty alleviation and food security in India?	Procurement Policy
	2019	What are the reformative steps taken by the government to make food grain distribution system more effective?	

THEME- LAND REFORMS			
SUB- THEME	**YEAR**	**QUESTION**	**IMPORTANT THEMES 2020**
Land Reforms	2013	Establish the relationship between land reform, agriculture productivity and elimination of poverty in Indian Economy. Discussion the difficulty in designing and implementation of the agriculture friendly land reforms in India.	• Land Reforms- Rationale, Progress and Challenges • Land Banks- Prospects and Challenges • Land Leasing in Agriculture • Tenancy in Indian Agriculture
	2016	Discuss the role of land reforms in agricultural development. Identify the factors that were responsible for the success of land reforms in India.	

THEME- INDUSTRIAL POLICY AND ECONOMIC LIBERALISATION			
SUB- THEME	**YEAR**	**QUESTION**	**IMPORTANT THEMES 2020**
Industrial Policy	2013	Discuss the impact of FDI entry into multi-trade retail sector on supply chain management in commodity trade pattern of the economy.	• FAILURE OF MANUFACTURING SECTOR- REASONS AND STRATEGIES NEEDED • MSMEs- Prospects, Challenges and Way Forward • Defence Manufacturing- Initiatives, Prospects and Challenges • Ensuring Self-Reliance in Pharmaceutical Industry • Electronics Manufacturing- Initiatives, Challenges and Way forward • Manufacturing of Medical Devices • Need for Solar Manufacturing Strategy • JOBLESS GROWTH IN INDIA- REASONS AND STRATEGIES NEEDED • Labour Reforms in India- Critical
		Though India allowed foreign direct investment (FDI) in what is called multi brand retail through joint venture route in September 2012, the FDI even after a year has not picket up. Discuss the reasons.	
	2014	Foreign direct investment in the defence sector is now said to be liberalised. What influence this is expected to have on Indian defence and economy in the short and long run?	
		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 the huge growth of services vis-a-vis industry in the country? Can India become a developed country without a strong industrial base?	

	2015	There is a clear acknowledgement that Special Economic Zones (SEZs) are a tool of industrial development, manufacturing and exports. Recognizing this potential, the whole instrumentality of SEZs requires augmentation. Discuss the issues plaguing the success of SEZs with respect to taxation, governing laws and administration.	Analysis of the 4 labour Codes • Decline in Female Labour Force Participation rate (LFPR) • Skilling India: Prospects, challenges and Way forward • Apprenticeship Training Program • Entrepreneurship Development in India
	2017	"Industrial growth rate has lagged behind in the overall growth of Gross-Domestic-Product (GDP) in the post-reform period" Give reasons. How far the recent changes in Industrial Policy are capable of increasing the industrial growth rate?	
Economic Liberalisation	2013	Examine the impact of liberalization on companies owned by Indian. Are they competing with the MNCs satisfactorily?	• Export-led Model of Development- Need, Constraints and way Forward • India's Experience with FTAs- Benefits, Challenges and Way Forward • DECODING INDIA'S REFUSAL FOR JOINING RCEP • Global Value Chains: A Tool for Structural Transformation of Economy • Foreign Sovereign Bonds • International Labour Organization (ILO) • Model Bilateral Investment Treaty
	2016	How globalization has led to the reduction of employment in the formal sector of the Indian economy? Is increased informalization detrimental to the development of the country?	
International Trade	2018	How would the recent phenomena of protectionism and currency manipulations in world trade affect macroeconomic stability of India?	• WTO Reforms • IMF QUOTA REFORMS • DATA LOCALISATION- PROS AND CONS • Decoupling Indian Economy from China- Aatma Nirbhar Bharat • Critical Analysis of Vocal for Local Campaign

THEME- INFRASTRUCTURE AND INVESTMENT

SUB- THEME	YEAR	QUESTION	IMPORTANT THEMES 2020
PPP Model/ Infrastructure	2013	Adaptation of PPP model for infrastructure development of the country has not been free from criticism. Critically discuss the pros and cons of the model.	• Digital Infrastructure- Prospects, Constraints and Way Forward • Logistics Sector- Constraints and Challenges

	2014	Explain how private public partnership agreements, in longer gestation infrastructure projects, can transfer unsuitable liabilities to the future. What arrangements need to be put in place to ensure that successive generations' capacities are not compromised?	• PPP - Need, Models, Constraints and Way Forward • PPP In Healthcare • HAM Model of PPP • Performance Analysis of Special Economic Zones (SEZs) in India
	2017	Examine the developments of Airports in India through Joint Ventures under Public-Private Partnership (PPP) model. What are the challenges faced by the authorities in this regard.	
Transport	2014	National urban transport policy emphasizes on moving people instead of moving vehicles. Discuss critically the success of various strategies of the government in this regard.	• Infrastructure Sector-Constraints and Challenges/ National Infrastructure Pipeline • Road Sector: Constraints and Strategies • Railways : Constraints and Strategies; PPP In Indian Railways • Civil Aviation • Ports & Shipping and Inland Waterways • Electric Mobility- Is India Ready for Electric Vehicles?
Energy	2018	Access to affordable, reliable, sustainable and modern energy is the sine qua non to achieve Sustainable Development Goals (SDGs). Comment on the progress made in India in this regard.	• Renewable Energy- Challenges and opportunities • National Minerals Policy 2019 • Energy Poverty in India • Coal Sector Reforms • Major Constraints in the Energy Sector • Performance Analysis of UDAY Scheme • Performance Analysis of Pradhan Mantri Ujjwala Yojana (PMUY) • Progress Report of Renewable Energy- Constraints and Challenges
		With growing energy needs should India keep on expanding its nuclear energy programme? Discuss the facts and fears associated with nuclear energy.	
	2020	Describe the benefits of deriving electric energy from sunlight in contrast to the conventional energy generation. What are the initiatives offered by our Government for this purpose?	

SECTION-1

AGRICULTURE AND ALLIED SECTOR

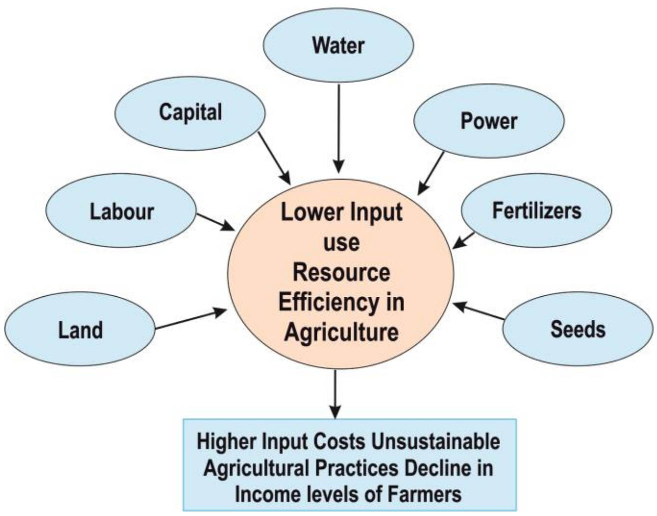
Previous Year Questions

SUB- THEME	YEAR	QUESTION
Cropping Pattern	2016	Given the vulnerability of Indian agriculture to vagaries of nature, discuss the need for crop insurance and bring out the salient features of the Pradhan Mantri Fasal Bima Yojana (PMFBY)
		What is allelopathy? Discuss its role in major cropping systems of irrigated agriculture.
	2017	What are the major reasons for declining rice and wheat yield in the cropping system? How crop diversification is helpful to stabilize the yield of the crop in the system?
	2018	How has the emphasis on certain crops brought about changes in cropping patterns in recent past? Elaborate the emphasis on millets production and consumption.
		Assess the role of National Horticulture Mission (NHM) in boosting the production, productivity and income of horticulture farms. How far has it succeeded in increasing the income of farmers?
		Sikkim is the first 'Organic State' in India. What are the ecological and non-economical benefits of Organic State?
	2019	How far is Integrated Farming System (IFS) helpful in sustaining agricultural production?

	2020	What are the major factors responsible for making rice-wheat system a success? In spite of the success how has this system become bane in India?
Subsidies and MSP	2013	What are the different types of agriculture subsidies given to farmers at the national and state levels? Critically analyze the agriculture subsidy regime with the reference to the distortions created by it.
	2014	"In the villages itself no form of credit organisation will be suitable except the cooperative society." – All Indian rural credit survey. Discuss this statement in the background of agriculture finance in India. What constrain and challenges do financial institutions supplying agricultural finances? How can technology be used to better reach and serve rural clients?
	2017	How do subsidies affect the cropping pattern, crop diversity and economy of farmers? What is the significance of crop insurance, minimum support price and food processing for small and marginal farmers?
	2018	What do you mean by Minimum Support Price (MSP)? How will MSP rescue the farmers from the low income trap?
Irrigation	2016	What is water-use efficiency? Describe the role of micro-irrigation in increasing the water-use efficiency.
	2019	Elaborate the impact of National Watershed Project in increasing agricultural production from water-stressed areas.
	2020	Suggest measures to improve water storage and irrigation system to make its judicious use under depleting scenario.
Technology missions	2015	How can the 'Digital India' programme help farmers to improve farm productivity and income? What steps has the Government taken in this regards?
Economics of animal rearing	2013	India needs to strengthen measures to promote the pink revolution in food industry for better nutrition and health. Critically elucidate the statement.
	2015	Livestock rearing has a big potential for providing non-farm employment and income in rural areas. Discuss suggesting suitable measures to promote this sectors in India
Marketing of agricultural produce	2014	There is also a point of view that agriculture produce market committees (APMCs) set up under the state acts have not only impeded the development of agriculture but also have been the cause of food inflation in India. Critically examine.
	2015	In view of the declining average size of land holdings in India which has made agriculture non-viable for a majority of farmers, should **contract farming** and land leasing be promoted in agriculture? Critically evaluate the pros and cons.
	2020	What are the main constraints in transport and marketing of agricultural produce in India?

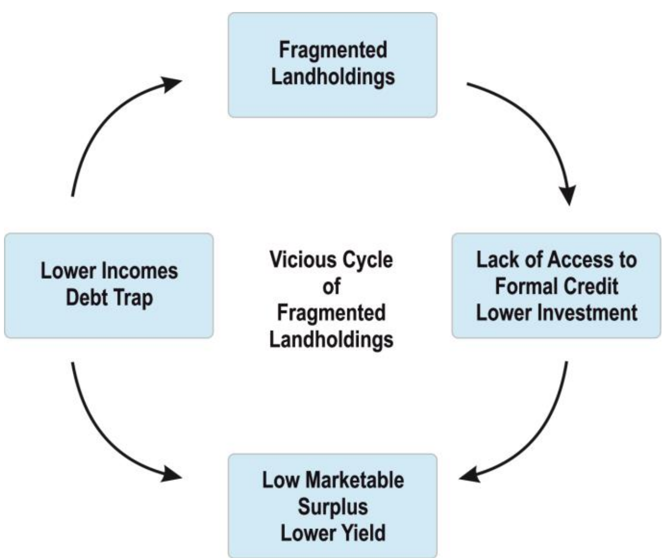
►ENHANCING INPUT USE EFFICIENCY IN AGRICULTURE

According to Dalwai Panel, to double farmers' income, agriculture should be treated as an enterprise with focus on 3 aspects- <u>Reducing Input costs</u>, Enhancing Productivity and higher prices. Agricultural inputs need to be efficiently utilized to fulfill dual objectives- <u>Increased income and Sustainable agriculture</u>.



►LAND

ISSUES: Net sown area is around <u>141 mha as against total geographical area of 328 mha</u>. However, the small and marginal farmers accounting for 83% of farmers own 48% of agricultural land. The average size of landholding has consistently reduced to 1.15 ha in 2011. This highlights the high level of fragmentation in the landholdings leading to multiple problems as shown below:



TENANCY IN AGRICULTURAL LAND

<u>Concept of Tenancy:</u> Land Leasing enables the farmers to lease out their agricultural lands to other farmers, landless, sharecroppers, tenants leading to agricultural efficiency, equity, and power reduction.

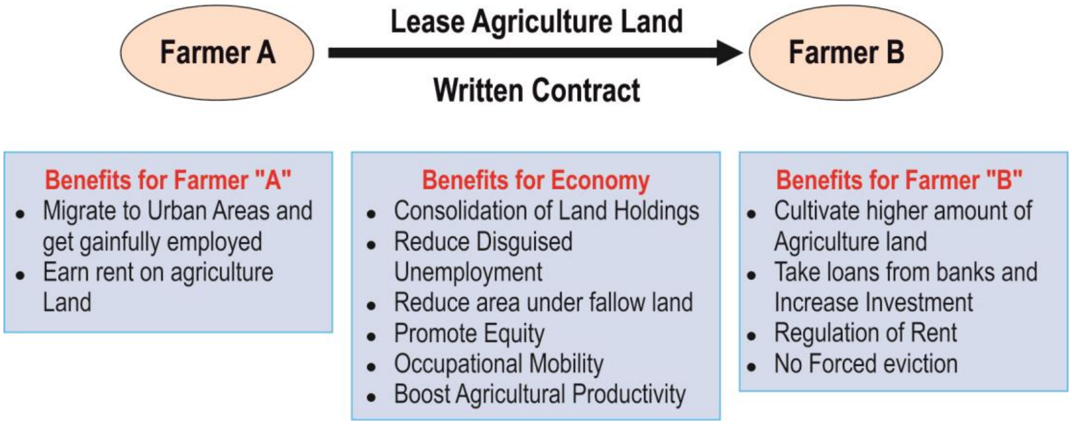
<u>Background:</u> The land leasing has been an integral part of Land reforms in India. The land Reforms after India's Independence focussed on (i) abolition of intermediaries, (ii) abolition or regulation of tenancy and (iii) imposition of ceilings on land holdings and redistribution of ceiling surplus land. However, the main objective to achieve high levels of efficiency and equity has been achieved only partially.

<u>Present Status:</u> Most state governments have either legally banned or imposed restrictions on agricultural land leasing. Restrictive clauses in the tenancy laws of various states include period of lease, regulation of rent, conditions for termination of lease, conferment of ownership rights on tenants etc.

<u>Case for Legalisation of Land Tenancy:</u> Restrictive land leasing laws have proved to be anti-growth and anti-poor on account of following reasons:

- Informal and Oral Tenancy – Tenants do not have access to institutional credit, insurance etc. and are prone to exploitation.
- Oral and informal tenancy discourages the tenants from making investment in land improvement.
- Reduced the occupational mobility of many landowners who have interest and ability to take up employment outside agriculture and yet are forced to stay in agriculture due to the fear of losing land if they lease out and migrate.
- Many landowners prefer to keep the land fallow due to the fear of losing land rights if they lease out. This leads to underutilisation of land. The lifting of ban or restrictions on leasing will result in better utilization of the available land and labour and increased farm output.
- Higher Equity and Economic justice as the land leasing enables the poor to have access to land and improve their income levels.
- NITI Aayog has pointed out that "***<u>Lease farming is an economic necessity and not a symbol of feudalism, as it was thought before</u>***". Earlier, Ban or restrictions on leasing were imposed to prevent exploitation of tenants. But now the situation has changed. The rural poor have become politically more powerful through panchayat raj institutions. A formal tenancy relationship would not be exploitative, rather it would

improve their bargaining power and enable them to get out of poverty trap.



WHAT MUST BE DONE?

- Incentivise states to adopt Model Agricultural Land Lease Act, 2016.
- Modernisation of land records to facilitate land leasing
- Promotion of Contract farming by organising tenant farmers into Farmer Producer Organisations (FPOs)
- Presently, Tenants are not covered under various Government schemes such as PM-KISAN. Hence, states should have a digital database of tenants that can be used to extend benefits under various schemes and programmes.
- Set up of Land Banks at Village level.

►WATER

PRESENT STATUS: Agriculture accounts for more than 80% of water consumption, out of which share of groundwater is quite high (60%). 52% of area is rain-fed wherein yield is almost 3 times lower.

NEED FOR ENHANCED WATER-USE EFFICIENCY IN AGRICULTURE: According to NITI Aayog's Composite Water Management Index (CMWI) report, India is facing worst water crisis in its history. By end of 2030, demand for drinking water will outstrip the supply. Almost 2.4 lakh people die every year due to lack of access to safe and clean drinking water. Water crisis could potentially lead to economic loss of around 6% of GDP.

PROBLEMS IN CURRENT WATER MANAGEMENT

- **Substantial area under rainfed**: About 72 million hectares (Mha) of net sown area (52%) is still completely dependent on rainfall. Rain-fed agriculture is 3 times less productive.
- **Regional imbalance**: Temporal and spatial variations in rainfall and water availability in the country.
- **Sub-optimal utilization of created facilities**: Wide gap between irrigation potential created (IPC) and irrigation potential utilized (IPU) due to- inadequate maintenance of canal system, lack of participatory management, changing land use pattern, deviation from the designated cropping pattern, soil degradation and delay in command area development.
- **Improper crop and cropping system**: High proportion of cultivated area under water guzzling crops like rice, sugarcane etc. India is net water exporting country as it exports more water intensive crops like rice, wheat etc. and it import less water intensive crops like pulses (Eco Survey 2015-16)
- **Imbalanced use of ground water:** The Easement Act, 1882, provides every landowner with the right to collect and dispose all water under the land and on the surface. This means that the owner can dig wells and extract water based on his discretion. Additionally, landowners are not legally liable for any damage caused to water resources because of over-extraction.
- **Free power** available to farmers has also led to over-exploitation.
- **Water logging and soil salinity** due to over-use of surface water.

HOW TO ADDRESS THESE PROBLEMS?

- **Enhancing water efficiency in Irrigated areas:** Reduce the difference between IPC and IPU through Proper maintenance of canals, Formation of water user associations, Rationalization of water tariffs, Changes in cropping pattern, micro-irrigation
- **Enhancing water efficiency in rain-fed areas**: Rainwater harvesting- Check Dams, Convergence between MGNREGA and water conservation, Desilting of ponds and water bodies. Conservation agriculture- Artificial and Natural Mulching, Zero Tillage
- **Optimum Utilization of Ground water**:

- Adoption of Model Bill to Control and regulate the Extraction of Groundwater- Setting up of Groundwater Regulating Authority, Compulsory registration of bore well-owners, Compulsory permission for sinking a new borewell, Restrictions on the depth of borewells etc;
- Replication of Andhra Pradesh Farmer Managed Groundwater Systems (APFAMGS) - Joint Management of Aquifers, Induce behavioral change, Self-Regulation of groundwater extraction;
- Rationalization of power subsidies; Separation of feeder lines.

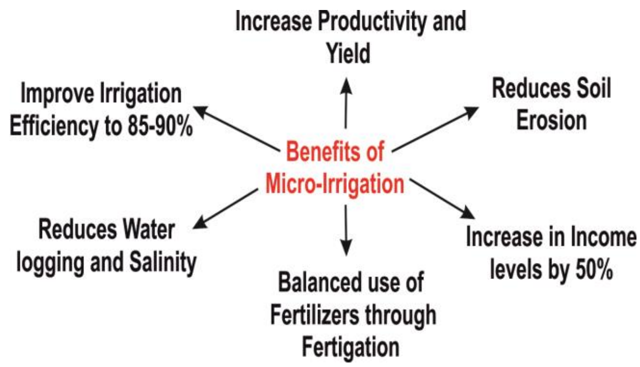
- **Promotion of Micro-Irrigation techniques** such as drip and sprinkler irrigation.

►MICRO-IRRIGATION- INITIATIVES, CHALLENGES AND WAY FORWARD

Micro irrigation (MI) systems (sprinkler, drip) promote precision farming by making water available to root zone of crops. MI holds immense potential in addressing dual challenges - Sustainability and Declining Income Levels. MI has multi-faceted benefits- Efficient deployment of inputs such as water, electricity, fertilizers, labour, higher crop productivity, better quality of produce etc. resulting in increased income. According to Dalwai Panel, MI can lead to **<u>40% Water Savings, 45% increase in productivity and 50% increase in income.</u>**

GOVERNMENT INITIATIVES

- **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY):**
  - **Har Khet Ko Paani:** Providing end-to-end solutions in Irrigation supply chain.
  - **Per Drop More Crop:** Promotion of Drip Irrigation and Sprinkler Irrigation.
- **Micro-Irrigation Fund (MIF):**
  - Managed by NABARD with corpus of Rs 5000 crore.
  - States can avail the fund to in order to subsidise the farmers for adoption of micro-irrigation techniques



Micro-Irrigation in India	
Challenges	**Strategies**
Area under MI has remained at 10 Mha against the potential of 70 Mha on account of following reasons: • Highly subsidized canal water and electricity • High initial capital and fragmented land holdings • Lower subsidy (55%) for marginal farmers under PMKSY for the adoption of Micro-irrigation. • No Major role of Banks in providing credit • No after-sale services such as removal of clogging in pipes • Frequent power outages • Dismantling of MI structure after every crop damages the equipment • Mainly concentrated in Western and Southern India • Used only for few selected crops	• Implement recommendations of Dalwai panel such as increase in annual coverage by 2.5 Mha, making MI compulsory agenda in all forms of irrigation - flow, lift. Ponds etc. • Educate farmers on highlighting benefits of Micro-irrigation. • Certain states in India have made usage of micro irrigation systems mandatory for water guzzling crops such as sugarcane. This initiative could also be taken up at the national level with the inclusion of other water guzzling crops. • Special scheme to provide loans to small and marginal farmers for the adoption of Micro-Irrigation

►SUBSIDIES vs. PUBLIC INVESTMENT

<u>Public Investment in agriculture</u> refers to long term investment in agriculture that benefits **all farmers (inclusive), environmentally sustainable, address the structural problems of agriculture** and enhances income of farmers. Examples include expansion of irrigation, investment in marketing infrastructure, Cold chain infrastructure, R&D for improved Seed varieties, technologies etc., financial support to SHGs, Promotion of mechanization etc.

Present Status: Firstly, the total Investment in Agriculture is only around 15% of agricultural GDP. This is much lower as compared to Gross Investment rate of 30% of India's GDP. Secondly, out of total investment of 15% of agricultural GDP, the share of Government Investment is only around 3%, the rest 12% investment comes from farmers and private sector.

Problems: The Government expenditure on agricultural subsidies such as MSP, water, power, fertilizers, loan waivers etc. is as high as 8.2% of Agri-GDP. These Subsidies are not inclusive (Mainly benefit rich farmers), not environmentally sustainable (Excessive water consumption, imbalanced fertilizer consumption, soil degradation etc.), create distortions (Free power- Huge loss to DISCOMs; MSP- artificial scarcity of food grains, higher focus on cultivation of water-intensive crops, lack of diversification etc.) and do not address the structural problems of Indian agriculture.

What should be done? Rationalize the Agricultural subsidies; Targeting of subsidies through DBT;

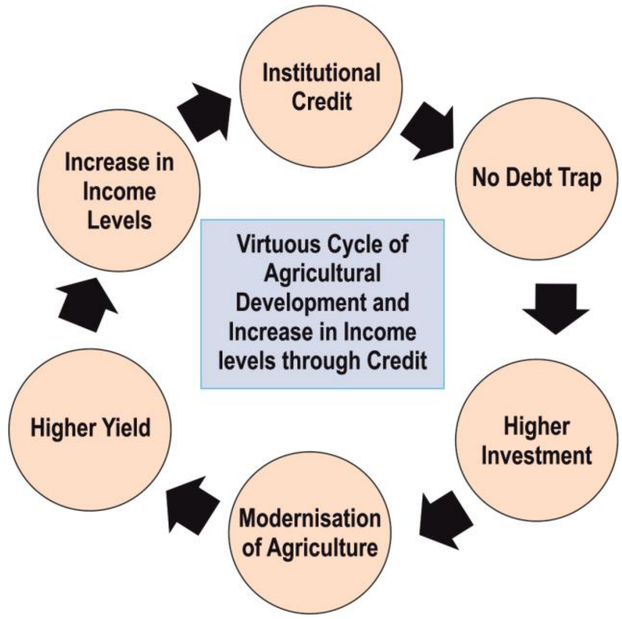
►AGRICULTURAL CREDIT

Importance: Meet the Credit needs of poor marginal farmers; Prevents Debt Trap; Improves access to agricultural inputs; Enhances Investment in agriculture; Enhances productivity through adoption of new technologies/ mechanisation etc.; Roughly every 1 per cent increase in agricultural credit produces 0.3 per cent increase in agricultural GDP.

INITIATIVES FOR THE PROMOTION OF AGRICULTURAL CREDIT

- Nationalisation of Banks, setting up of Regional Rural Banks and NABARD
- Priority sector lending requirements.
- KISAN Credit card scheme
- Setting up of Rural Infrastructure development Fund (RIDF) with NABARD for funding of rural infrastructure projects
- Ground Level Credit (GLC) policy: Under this policy, Government announces GLC targets for agriculture and allied sector in the Union budget every year which banks are required to achieve during the financial year.
- interest subvention scheme (ISS) for short term crop loans
- On-lending wherein the banks can sanction loans to NBFCs and HFCs, who then would lend these loans to the sectors categorized as Priority sector.

Present Status: 20% growth rate in agriculture credit in the last decade; Percentage of farmer households indebted: 52%; Average loan amount: Rs 47,000; Share of Institutional Credit: 60%.



PROBLEMS IN AGRICULTURAL CREDIT

- **Lower Share of Long-term Credit**: Long term Investment loans (35%) and short-term crop loans (65%). While crop loans meet the seasonal production credit demand of the farmer, investment loans contribute to capital formation in agriculture and sustain production in the long run. The higher share of crop loans is on account of two reasons- (a) interest subvention available only on short term crop loans (b) Inability of farmers to provide collateral for long term high value investment loans.
- **Share of Small and Marginal Farmers**: only 60% of the loans due to poor land records and fragmented land holdings.
- **Regional imbalances**: Higher share of southern region
- **Rising NPAs of the Banks**: Low Credit creation
- **Coercive action for repayment** leading to increase in farmer suicide cases.
- **Problems with the Priority sector lending**: Predominance of large value loans which highlights share benefit for richer farmers; concentration of agricultural loans in urban areas; March rush etc.

HOW TO ADDRESS THESE PROBLEMS?

- Set up Credit Guarantee fund trust on the lines of fund set up for MSMEs. This fund should guarantee repayment of the loans taken by farmers for long term Investment loans.
- Strict adherence to PSL guidelines: Out of 18% loans earmarked for agriculture, 10% of the loans should be given to small and marginal farmers according to RBI. A sub-limit for loans to tenant and landless farmers needs to be introduced.
- Digitization of land records to make it easier for farmers to access institutional credit.
- Saturation drives for KCC Scheme
- Mobilization of farmers into FPOs
- Special focus on unbanked regions to correct regional disparity
- Technology driven portal for the banks to facilitate ease of credit to the farmers on the lines of PSBLoansIn59 minutes to MSMEs.

►SOIL

PROBLEMS WITH INDIAN SOILS

According to research carried out by TERI, almost 30% land degraded in India leading to loss of 2.5% of GDP.

- **Imbalanced Use of Fertilisers:** Fertilizer consumption is grossly imbalanced, and skewed towards N. With the implementation of nutrient based subsidy (NBS) by keeping urea (Source of N) out of ambit of NBS, the P and K fertilizers became costlier leading to their decreased consumption and higher consumption of Urea. As a result, fertilizer consumption ratio (N:P:K) widened from 4:3:1 (2009-10) to 7:3:1 (2015-16).
- Such fertilizer practices obviously result in soil degradation and pollution of groundwater, air and soil through nitrate leaching, denitrification losses etc.
- Acidification, Salinization, Alkalization and Waterlogging
- Changes in soil organic matter under intensive cropping
- **Decline in Soil Physical Conditions**: Excessive tillage, use of heavy machinery, removal of crop residues and low organic matter. Poor status of soil structure, water holding capacity, aeration, etc. not only cause a decline in availability of nutrients and soil microbial activities, but also decrease crop productivity.
- **Poor and incomplete fertilizer prescription:** Sub-optimal and incomplete fertilizer prescriptions offered by the Soil testing laboratories.

HOW TO ADDRESS THESE PROBLEMS?

Presently, Soil Health Card (SHC) Scheme aims at issuing SHC to each one of 120 million farm holdings at 2-year interval on a continuing basis. This needs to be complemented by other steps as shown below:

1. **Integrated nutrient management:** Denotes the practice of using one or more sources of plant nutrients along with fertilizers.

   Need to promote INM- (i) Demand-supply mismatch in availability of chemical fertilisers leading to their higher imports; (ii) Both chemical fertilizers and the organic sources needed; and (iii) growing environmental concerns over chemical fertilisers.

   Advantages of INM: (i) restoration of soil fertility (ii) Addressing nutrient deficiencies; (iii) enhancing use efficiency of nutrients and other inputs; and (iv) improving farm income.

   Major ingredients of INM:

   - Organic manures like farmyard manure (FYM), composts, poultry manure, bio-gas slurry etc. are useful inputs for maintaining soil fertility and ensuring yield stability.
   - Inclusion of legumes pigeon pea, black gram, green gram and soybean as inter-crops would help in fixing atmospheric nitrogen and enhances soil fertility.
   - Crop residues and farm wastes
   - Bio-fertilizers such as different types of microbial inoculants such N-fixers (Rhizobium, Azotobacter, Azospirillum)
   - Municipal wastes and industrial by-products such as Press-mud (by-product of sugar industry). It contains high amounts of $CaCO_3$ and, therefore, can be used as an ameliorant in acid soils.
   - Management of problem soils- Application of lime in Acidic Soils, Use of Gypsum in Saline and Alkaline soils, application of micro-nutrients etc.
2. Establishment of additional Soil Testing Laboratories (STLs) through PPP Mode.
3. Creation of a dedicated service cadre for soil health monitoring
4. Increase in the periodicity for renewal of Soil Health Cards (SHCs) from 2 years to 3 years would reduce the burden on the Soil Testing Laboratories (STLs) and enable them to carry out more testing.

5. Promoting balanced utilisation of Chemical fertilisers by carrying out reforms in the fertiliser policies.

►MECHANISATION OF INDIAN AGRICULTURE

Even though agriculture sector contributes only 16% of GVA, it accounts for almost 45.7% of India's workforce. This shows high level of disguised unemployment and inefficient utilisation of Indian workforce. This needs to be countered through skilling of rural youths and promotion of agricultural mechanisation.

NEED FOR AGRICULTURAL MECHANIZATION

- The agricultural mechanization can reduce the increasing labour costs in the rural areas. It can enable the farmers to grow a greater number of crops in a single year due to reduction in the harvesting time.
- There has been feminization of Indian agriculture with women farmers accounting for almost 1/3 of the total farmers. Mechanization would help address the needs of women farmers.
- According to the Dalwai Committee, the adoption of agricultural mechanization would reduce the input costs by 25%, enhance the productivity by 20% and increase the incomes of the farmers by 25-30%.

PRESENT STATUS OF MECHANISATION

- **Farm Mechanization in India:** 40-25%; Even though India is the largest producer of tractors, a significant share of production is exported.
- **Farm Mechanization in other countries**: USA (95%); Brazil (75%); China (57%).
- **Regional Disparities**: Northern India has higher levels of mechanization compared to other regions. (Rice and Wheat crops having the largest extent of mechanization)

CHALLENGES WITH ADOPTION OF AGRICULTURAL MECHANIZATION

Dominance of Fragmented landholdings: The average landholding size has reduced to 1.23 ha. 83% of the farmers in India are small and marginal and they own around 40% of the agricultural land.

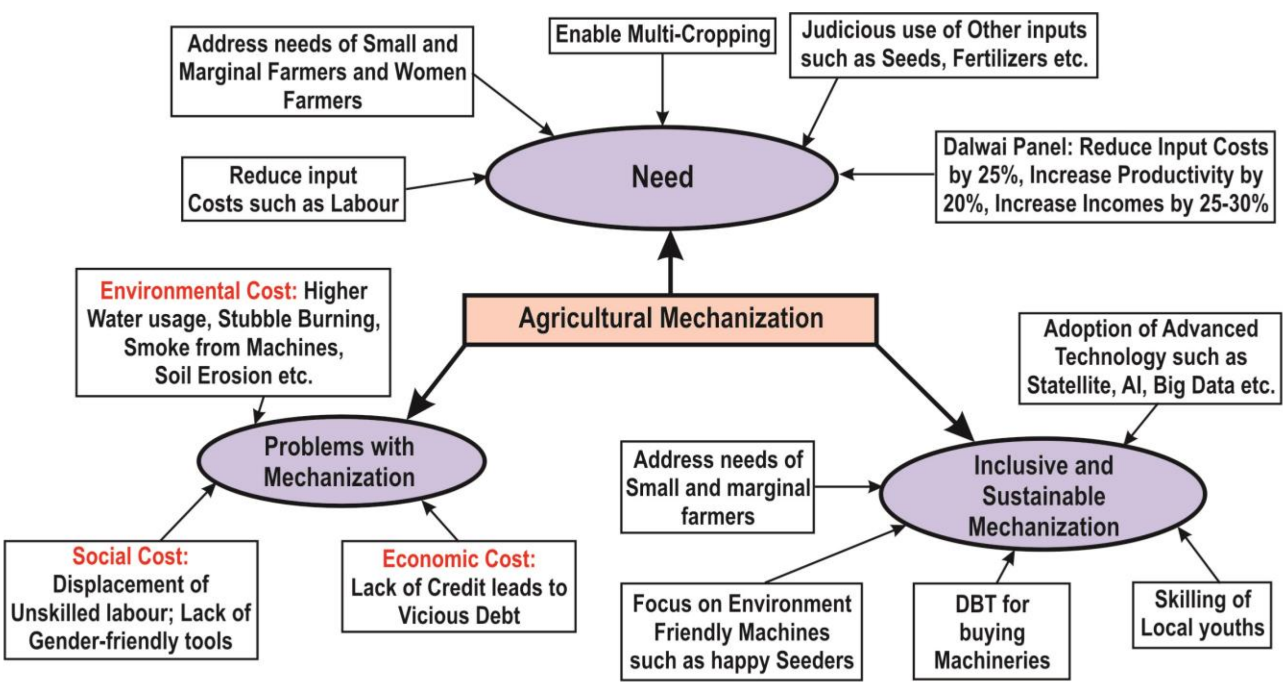
Capital Intensive: The agricultural machinery such as tractors, harvesters etc. are quite costly and hence unaffordable to the vast section of Indian society.

GOVERNMENT INITIATIVES

Sub-Mission on Agricultural Mechanization (2014): Assistance to the Farmers for procurement of agricultural machineries; Custom Hiring Centres; Demonstration of Newly Developed Agricultural/ Horticultural Equipment.

Promotion of Agricultural Mechanisation for in-situ Management of Crop residue: Implemented in Punjab, Haryana, UP and NCT of Delhi; Setting of Custom hiring centres; Financial Assistance to the farmers for buying environment friendly agricultural machinery.

FARMS (Farms Machinery Solutions) Mobile App: Facilitates the farmers to hire agricultural machineries and tools.



►YIELD GAPS AND TOTAL FACTOR PRODUCTIVITY IN AGRICULTURE

Present Status: There exists large scale yield gaps in the Indian Agriculture. This yield gap exists at two levels — Firstly, between the best scientific practices and the best field practices, and second, between the best field practices to the average farmer practices. These yield gaps exist in almost all crops such as Rice, Wheat, Pulses, Maize, Sugarcane etc. For example, only 2 per cent of paddy and wheat growers use hybrids. These yield gaps can be increased by enhancing Total factor productivity.

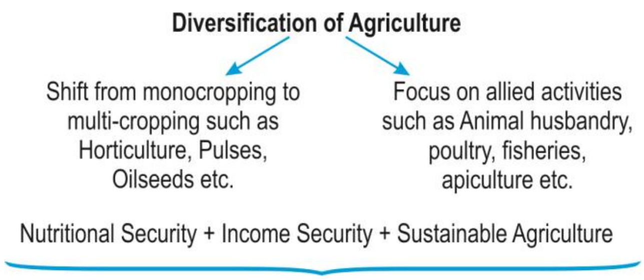
Concept of Total Factor Productivity: Total Factor Productivity (TFP) measures the efficiency with which inputs are utilised. An increase in TFP would mean that inputs are more efficiently utilised through innovations and improved management techniques. An increase in TFP is associated with higher efficiency in use of the available inputs, higher output and higher profits.

STEPS TO INCREASE TOTAL FACTOR PRODUCTIVITY

- Investment in R&D for the adoption of better technology
- Adoption of high yielding varieties of seeds
- Access to micro-Irrigation techniques
- Focus on extension activities to empower farmers through sharing information, technology, skills, farm management practices
- Balanced utilisation of fertilisers
- Thrust on Agricultural Mechanisation
- Organise farmers into Farmer Producer Organisations (FPOs) to take benefit of economies of scale.
- Improve post-harvesting infrastructure such as collection centres, warehouses, cold chain infrastructure etc.

►AGRICULTURAL DIVERSIFICATION- NEED FOR RAINBOW REVOLUTION

The phenomenal increase in production of Food grains after the Green Revolution has not translated into commensurate increase in food security. This is evident in India's poor ranking on global indicators such as Global Hunger Index (GHI). This can be attributed to lack of diversification in agriculture, which has also led to stagnation in income levels of farmers.



Nutritional security through Diversification: Presently, the production basket of agriculture is dominated by Rice and Wheat. However, there has been shift in consumption pattern towards more protein-based foods such as Pulses, Milk, Egg, Fish, Meat etc. leading to demand-supply mismatch and thus nutritional insecurity. The diversification towards cultivation of other crops and livestock rearing would address the micronutrient deficiencies, Vitamin, iron deficiencies etc.

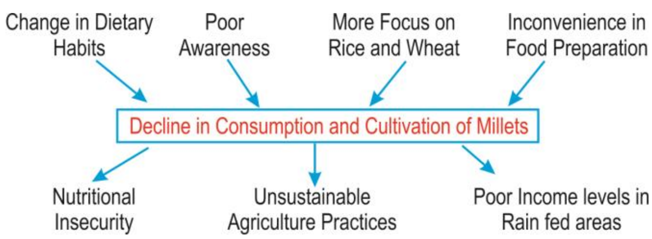
Enhancing Income levels of Farmers through Diversification: According to Dalwai panel, expansion in diversification by 1 ha could increase annual income of farmers by Rs 1 lakh on account of following reasons:

- **Higher Productivity**: The cereal crops occupy 42% of agricultural land but contribute only 20% of agricultural GDP. However, horticultural crops occupy only 14% of agricultural land but contribute 33% of agricultural GDP.
- Agricultural production would be more aligned with demand and hence fetch higher prices.
- Increase in the cropping Intensity due to shorter crop duration in comparison to Rice and wheat
- Reduction in risks and ensure constant flow of income
- Optimum utilization of land

Thus, looking at these benefits, the Government has to now focus on **Rainbow revolution** in order to bring about holistic development of all sectors- horticulture, animal husbandry, poultry, fisheries, food grains etc. This would have multiple benefits- nutritional and food security, income security for farmers and overall make agriculture more inclusive and sustainable.

►NUTRI-CEREALS/ MILLETS

Millets such as Jowar, Bajra, ragi etc. are **dual purpose, nutrient dense, hardy and low input intensive crops** that have potential to address malnutrition and climate change, while promoting sustainable agriculture.In India, millets are grown on about **17 million ha** with annual production of **18 million tonnes and contribute 10 percent** to the country's food grain basket.



Initiatives taken by Government to address above problems include- **National Year of Millets (2018), NFSM-Coarse Cereals** etc.

HEALTH BENEFITS

- Millets are actually three to five times more nutritious than rice and wheat in terms of proteins, minerals and vitamins. Millets are rich in B vitamins, calcium, iron, potassium, magnesium, zinc, apart from being gluten-free, and low in glycaemic index (GI). These are more suitable for people with gluten allergies or high blood sugar levels.
- Reduction in Cholesterol, Sugar
- FAO has recognised importance of Millets for meeting **SDGs- 2, 3, 12 and 13**

CLIMATE RESILIENCE

- Abiotic (drought, temperature and salinity) and Biotic (pest and disease) stress tolerant
- Integral part of Conservation agriculture
- Climate change mitigation by carbon sequestration

SUSTAINABLE PRODUCTION SYSTEM

- 2.5 times lesser water requirement than rice
- Natural soil conditioner due to powerful root systems
- Multi-purpose: Food, Feed, Fodder, Biofuels and Brewing
- Potential to enhance income in rainfed areas

STRATEGIES TO PROMOTE NUTRI-CEREALS

- **Special Agribusiness Zones (SABZ) for millets**: Focus on development of particular millets which is popularly cultivated in the local areas. Examples: sorghum in Telangana, finger millet in Karnataka, pearl millet in Gujarat, and small millets in Madhya Pradesh. These SABZs can develop around FPOs, farm gate level primary processing facilities, ware housing units and value-added food products.
- **Promoting Organic Millets** to cater to increased demand of the consumers.
- **Explore Trade opportunities:** The export of Indian millets has not been up to the mark as compared to other cereal grains due to poor quality; farmers need to be educated about quality concerns at all stages of production and harvesting.
- **Federating millets farmers** as Farmer Producer Organizations (FPOs)
- **Expanding the coverage** of small millets under MSP.
- **Efficient implementation of PM-AASHA** to undertake higher procurement of Millets
- Promotion of **Contract farming** for millets

Thus, we need to focus on **supply side factors** (incentive to farmers, high yielding crops) and **demand side factors** (value addition, labelling, awareness generation, inclusion under ICDS, MDM etc.) to ensure success of Millet Revolution.

►PULSES

India is the world's largest producer of pulses with 23 million tonnes from an acreage of 30 million hectares. The country accounts for 35 per cent global area and 27 per cent of global production. Pulses are commonly grown under rainfed condition all over India (87 per cent rainfed) during two principal seasons of the year, namely, kharif rainy season.

PRODUCTION OF PULSES

Top Pulses: Top six pulses grown in India are chickpeas (chana), pigeon pea (Arhar/tur dal), urad beans (urad dal), mung beans (moong), lentils (masoor) and peas.

Top States: Production of pulses has largely shifted from northern India to central and southern part. More than 90% of total pulses production is realized in 10 states namely, MP, Rajasthan, UP, Karnataka, AP, Gujarat, Jharkhand, CG and Telangana

Net Importer: India accounts for 25% import of Pulses across the world.

Demand-Supply Mismatch: With the rising incomes and fall in the poverty combined with greater health consciousness, the demand for pulses has run ahead of production.

GOVERNMENT INITIATIVES

- National Food Security Mission (NFSM)- Pulses: Aims to Increase Pulses production by 3 Million tonnes
- Increase in MSP
- Price Support Scheme (PSS) under PM-AASHA
- Creation of Buffer Stock of Pulses by NAFED.
- Price Stabilisation Fund Scheme to check volatility in the prices.

STRATEGIES TO BOOST PULSES PRODUCTION

Utilization of potential area of rice-fallow lands: About 30-40 per cent of the area currently left fallow after paddy harvest can be converted into productive farmlands; Additional 3 Mha of pulses and 1 Mha of oilseeds can be brought under cultivation through "Targeting Rice Fallow areas" sub-scheme under RKVY.

CHANGING CROPPING PATTERN

- Diversification: Replacement of less remunerative crops with pulses;
- Promotion of inter-cropping

INCREASING PRODUCTIVITY

- Bridge the yield gap between Pulses and other cereal crops to incentivise farmers to take up Pulses production.
- **Redesign of NFSM-Pulses**: Two categories of districts for coverage under NFSM for pulses - NFSM Pulses for general districts and NFSM Pulses+ for districts where yield levels are lower than state/national averages.
- **Strengthening storage and processing to reduce post-harvest losse**s: Pulses are vulnerable to post harvest loss which has been estimated to be the order of 20 to 30 per cent due to -Traditional dal mills resulting in low dal recovery etc.
- Bringing down duration of pulse crops through Technological interventions

►OILSEEDS

Despite being the fifth largest oilseed crop producing country in the world, India is also one of the largest importers of vegetable oils. The demand-supply gap in the edible oils has necessitated huge imports accounting for 60 per cent of the country's requirement. For this, government has recently launched National Edible Oil Mission-Oil Palm (NMEO-OP)

IMPORTANT FACTS

Area under Oilseeds: <u>27 Mha (14% of agriculture area)</u>. It has remained almost stagnant (with slight variation) both in terms of absolute area as well as percentage of area under agriculture.

Production of Oilseeds: <u>33 MT (2019-20)</u>. The overall production has neither consistently increased nor decreased in the last decade. It has been fluctuating and has remained around 30 MT in the last decade.

Demand-Supply Mismatch of Edible Oils: Domestic requirements: 25 MT; Domestic Production: 10 MT from primary sources (Soybean, Groundnut, Sunflower etc.) and Secondary sources (Palm oil, coconut, rice bran, cotton seeds etc.). The remaining 60 per cent of requirement is met through imports.

Of imported edible oils, share of palm oil is about 60% followed by soybean oil and sunflower. India has emerged as the largest importer of vegetable oils in the world followed by China & USA.

Import bill: Rs 75,000 crore (2020-21). In the current year, the import bill could go up to Rs 1 lakh crores.

INITIATIVES TO BOOST OILSEEDS PRODUCTION:

- National Food Security Mission (NFSM)-Oilseeds & Oil Palm: Distribution of quality seeds, improved technologies, Distribution of micronutrients etc.
- Increase in the MSP on Oilseeds
- Guaranteed procurement through PM-AASHA
- Targeting Rice Fallow Areas (TRFA) for cultivation of Pulses and Oilseeds. Once the Rice is harvested, residual moisture left in the soil is sufficient to grow Pulses and Oilseeds. Introduction of Pulses and Oilseeds in Rice fallows will not only increase production of Pulses and Oilseeds, but it will also lead to doubling farmers income.

DETAILS ABOUT NATIONAL EDIBLE OIL MISSION-OIL PALM (NMEO-OP)

World's Largest producers: Indonesia followed by Malaysia account for 85% of Production

Status in India (2019)
Area: 3 lakh hectares
Production: 2.8 lakh tonnes
Largest Producer: Andhra Pradesh and Telangana

Demand Supply Mismatch
Palm oil Imports into India: 60% of Edible oil requirements and 99% of Palm oil requirements

National Edible Oil Mission-Oil Palm (NMEO-OP)
Ensure Self-Reliance in Palm oil and reduce its import dependence

Challenges with Palm Oil Cultivation
Environmental Sustainability: Deforestation, loss of biodiversity, Water Scarcity etc.

Benefits of Palm Oil Cultivation
Higher Yield; Lower Land Requirements; Higher Income; Reduce Import dependence

OBJECTIVES

Increase area and Production: Increase area under Palm Oil cultivation from 3 lakh hectares to an additional 6.5 lakh hectares. Production of Crude Palm Oil (CPO) is expected to increase to 11.20 lakh tonnes by 2025-26.

Focus Areas:

- Price assurance to the farmers to protect them from volatility in the prices of Crude Palm oil
- Assistance to the farmers for buying various inputs such as planting material
- Special emphasis on the North-eastern States and Andaman & Nicobar Islands.

Funding: Centrally sponsored scheme- to be financed by both Centre and States.

WAY FORWARD

STRATEGY TO PROMOTE CULTIVATION OF OILSEEDS (Dalwai Panel Recommendations)

- **Increasing production** through adoption of high yielding varieties of seeds; soil and moisture conservation techniques in rainfed areas; balanced Utilisation of fertilisers; Intercropping of Oilseeds with other crops; Contract farming etc.
- **Encourage Cooperatives and FPOs** and link them to oil processing Industries.
- Reduce per capita consumption of edible oil and minimize import. Campaign for healthy oil consumption.
- **Promotion of Secondary Sources** (rice bran, coconut, cotton seed, oil palm and TBOs)
- **Enhancing capacity utilization** of domestic processing industries
- Promoting **consumption of coconut as edible oil**.

Increasing Palm oil Cultivation in India	
Benefits	**Challenges**
Aatma-Nirbhar in edible oils: Palm oil accounts for 60% of import of edible oils. 99% of domestic palm oil requirements met through imports. **Higher yield of edible oils:** One hectare of palm oil cultivation gives about 4000 kg of oil as against 500kg in case of sunflower. **Lower land requirement** as palm oil cultivation gives higher yield of edible oils in comparison to sunflower,	**Longer gestation period** of at least 4-5 years and hence restricts income flow to the farmers during initial years. **Smaller land landholdings:** Small holdings of farmers with limited resources. **Fluctuation in prices** in the international market. **Erratic monsoon** leading to shortage of water. **Competition with other economically** viable crops such as rubber, arecanut, sugarcane, banana, coconut etc.

groundnut etc. **Low maintenance costs** due to low pest and disease resistance. **Increase in income levels** of the farmers by providing year-round returns. **Boosts job creation and value addition** by giving push to Food processing Industries.	**Environmental damage:** Diversion of forest land, excessive water consumption, loss of biodiversity etc. **International Experience:** IUCN: Oil palm expansion has led to deforestation, degradation of natural habitats in parts of tropical Asia and Central and South America.

►HORTICULTURE SECTOR- NEED FOR GOLDEN REVOLUTION

The horticultural sector covers six categories, namely pomology (fruits), olericulture (vegetables), floriculture (flowers), plantation crops, spices, aromatics and herbal medicines.

IMPORTANCE

- High value crops due to higher demand from consumers due to greater awareness of nutritional benefits.
- Higher returns per unit of land as compared to cereal crops and hence beneficial for small and marginal farmers. - **Replacing 1 hectare of staple crops with horticultural crops increases annual income by Rs 80,000. (Dalwai Panel)**
- Ensures Nutritional security by overcoming vitamin and micronutrient deficiencies
- Being labour intensive, generates more employment opportunities.
- Boosts secondary agriculture by developing cottage-based Industries.

PRESENT STATUS OF HORTICULTURE: India is the second largest producer of fruits and vegetables globally; second largest producer and exporter of Spices. Occupying only about 14 per cent of agricultural land, horticulture contributes more than 33 per cent to the agricultural GVA.

Area: 25 Mha; Production: 300 MT; Contribution to Agri-GDP: 33%; Productivity: 12.5 tones/ha (Food grains- 2.25 tones/ha)

GOVERNMENT INITIATIVES

Mission for Integrated Development of Horticulture (MIDH): High density plantations, protected cultivation, micro-irrigation, quality planting material, rejuvenation of senile orchards, and post-harvest management and marketing.

CHALLENGES IN HORTICULTURE

- Higher Capital requirements
- Longer sowing to harvest cycle for some of the fruits such as Apple, Guava etc.
- Large scale prevalence of old and senile orchards impacts productivity. Majority of the orchards also have low planting density.
- Availability of quality seed and planting material impacts quality of produce.
- Poor tree canopy management.
- Rainfed cultivation, with majority of the horticultural cultivation having no access to irrigation.
- Initial cost constraints in adoption of improved technologies.
- Facilities for post-harvest management have not kept pace with production growth.
- Unorganised supply chain not suitably integrated for managing perishable produce.
- Lack of appropriately trained extension services for horticulture.

STRATEGY TO BOOST HORTICULTURAL PRODUCTION

- Increasing the output through higher productivity
  - Hybrid technology for high productivity and quality- Hybrids of tomato, chilli, cucumber and muskmelon
  - Quality planting material and seed production- Creation, modernisation and accreditation of nurseries
  - High density planting system- higher yield and net economic returns per unit area, more efficient use of inputs
- Increasing the output through area expansion such as Integrated Farming system approach, Urban & Peri-urban Horticulture
- Resource use efficiency or savings in cost of production through micro-irrigation, fertigation, adoption of mechanisation to reduce labour costs
- Increase in cropping intensity by enhancing Irrigation, Crop Rotation, Mixed Cropping etc.
- Diversification towards high value crops within horticulture such as floriculture, cashew, Cocoa, mushrooms, spice and medicinal plant cultivation
- Improvement in the market access and marketing system

- Creation of near-farm occupations in post-harvest handling facilities

►HORTICULTURE PLUS

Horticulture is considered as high value agriculture. However, within the horticultural sector, there are specific crops that can be considered as "Horticulture Plus". These include flowers, cashew, cocoa, mushrooms, spices and aromatics, etc.

PRESENT STATUS

Floriculture: Important agribusiness with immense potential for generating self-employment and entrepreneurship among small and marginal farmers in both urban and rural areas. Though, India dominates in terms of area under cultivation, yet India's yield per hectare is low. As a result, India's contribution to the global floricultural export market is very minimal.

Spices: India is the largest producer, consumer and exporter of spices and spice products in the world. As the global demand for the spices grow, farmers should diversify into high-value-plus crops like saffron, cardamom, turmeric, chillies, ginger and vanilla beans.

Cashew and Cocoa: Cashew is grown in number of states such as Kerala, Karnataka, Goa, Maharashtra, Tamil Nadu, Andhra Pradesh etc. Cashew improves the farm income and sustains employment for 1.5 million people in the cashew farming. Cultivation of cocoa is gaining momentum and is grown in states such as Tamil Nadu and Andhra Pradesh. India imports around 60% of the demand for Cocoa.

►COMBATING VOLATILITY IN TOP CROPS

Tomato, Onion and Potato (TOP) form almost 50 per cent of the total fruits and vegetables. However, there are large scale price fluctuations in these commodities which adversely affect both consumers as well as farmers.

REASONS FOR VOLATILITY IN PRICES

- Unfavourable weather conditions which causes demand-supply mismatch
- Absence of post-harvesting infrastructure such as Collection centres, warehouses, cold chain infrastructure etc.
- Lack of suitable transportation and marketing infrastructure
- Black marketing and hoarding by middlemen and traders

STEPS TO COMBAT VOLATILITY IN TOP CROPS

- Improve the supply chain infrastructure such as collection Centres, warehouses etc.
- Build up adequate Buffer Stock close to the markets.
- Impose Stockholding Limits under Essential Commodities Act, 2020.
- Ban on Export of these commodities in event of large-scale price rise.
- Organize farmers into FPOs

►AGRICULTURE MARKETING- THE KEY TO ALLEVIATE AGRARIAN DISTRESS

Essentially, the Indian agriculture can be considered as an enterprise with two distinct components- Production and Post-Production activities. With respect to agricultural production, India has not only become self-sufficient in terms of food production, but it has also emerged as a net exporter of agricultural products. However, the post-production activities of Indian agriculture have not kept pace with the production related activities. The quantities of marketable surplus have multiplied by almost 10 times during the last 50 years. However, the agriculture marketing infrastructure continues to remain out-dated.

Government has converted the COVID-19 crisis into a reform opportunity by undertaking long pending reforms in agriculture marketing. Out of 11 measures, 3 measures seek to <u>liberalize agricultural marketing</u> and hence hailed as <u>1991 moment for agriculture</u>. The 3 farms acts are - Act to promote Inter-state and Intra-State Trading, Act to promote Contract farming and Amendments to Essential Commodities Act. However, these 3 farm Acts have been opposed by various stakeholders- Farmers, Traders and State Governments on account of various reasons:

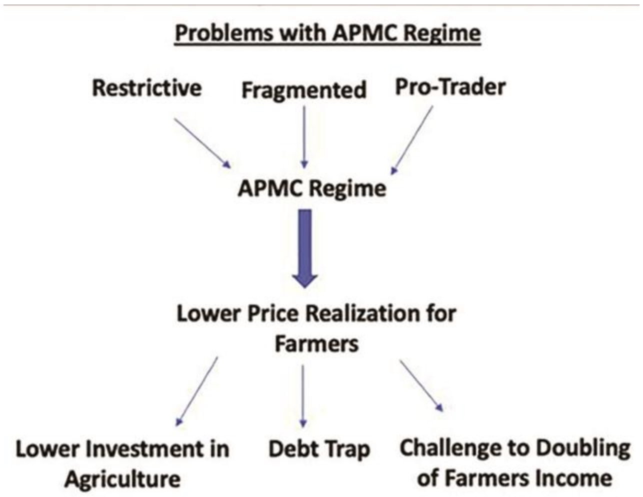
- ***Discontinuation of MSP via open-ended procurement***
- ***Gradual dismantling of the Public Distribution System (PDS),***
- ***Loss of price discovery mechanism established by the APMC mandis***
- ***Exploitation by the corporates,***
- ***Fear of a reduction in the scope and size of PDS***

Let's understand as to what extent these fears are justified and whether the new marketing reforms would indeed benefit the Indian agriculture.

►PROBLEMS WITH AGRICULTURAL MARKETING IN INDIA

Most of the State governments enacted the Agricultural Produce Market Regulation Act (APMC Act) which authorizes the States to set up and regulate marketing. Apart from that, there are more than 22,000 Rural Markets or Grameen Haats under the control of local bodies, panchayats, APMCs, etc.

PROBLEMS WITH THE APMC REGIME



RESTRICTIVE REGIME: Under the present APMC Act, farm produce should be sold only at regulated markets through registered intermediaries. Further, the Essential Commodities Act allows central and state governments to place restrictions on the storage and movement of commodities deemed essential by governments.

FRAGMENTED AGRICULTURAL MARKETING with about 2500 regulated APMCs, 5000 sub-market yards and thousands of Rural Markets or Grameen Haats. Hence, due to this fragmented marketing system the agricultural commodities pass through multiple middlemen and traders leading to escalation in prices and prevents farmers from getting remunerative prices.

LACK OF FREEDOM TO FARMERS to sell their produce to whomsoever and wherever they want.

LACK OF ACCESS TO APMCS: An average APMC in India serves an area of around 450 sq.km as against the recommendation of 80 sq. km. given by M.S. Swaminathan Committee. On account of this, the farmers are forced to sell their produce at lower prices outside the APMCs.

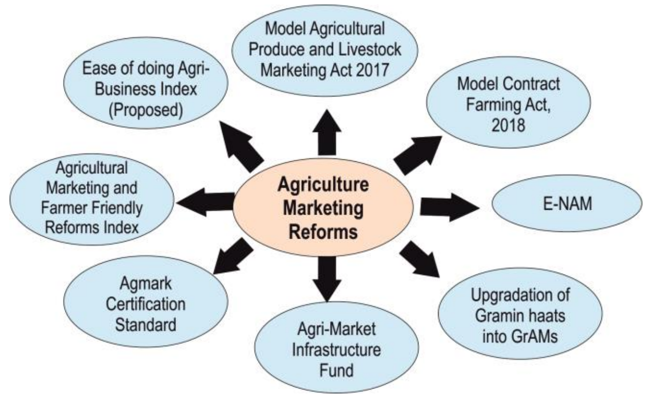
AGAINST INTERESTS OF SMALL AND MARGINAL FARMERS who are forced to sell at lower prices due to their low marketable surplus and poor bargaining power.

POOR INFRASTRUCTURE OF THE APMCs leading to improper storage and consequently higher post-harvest losses; No electronic auction platform

IMPOSITION OF MULTIPLE FEES IN APMCs which is estimated to be around 15% of the value of the agricultural produce; Increased prices and affect food processing Industries

Higher Post-harvest Losses in the range of 20-25% of produce accounting for Rs 92,000 crores loss.

►CRITICAL ANALYSIS OF VARIOUS GOVERNMENT INITIATIVES



1. FARMERS' PRODUCE TRADE AND COMMERCE (PROMOTION AND FACILITATION) ACT, 2020

MANDATE

Freedom to the farmers to sell their produce to whomsoever and wherever they want. Farmers can sell the agricultural produce directly from the "Trade Area" without the need to go to APMCs. The trade area includes farm gate, factory premises, warehouses, cold storage etc. No market fee would be imposed on the sale of the agricultural commodities in the Trade area.

CRITICAL ANALYSIS

Around 17 State governments having amended the APMC Act to make it more liberal and bring it in line with Model Agriculture Produce and Livestock Marketing Act, 2017. For example, Kerala does not have an APMC Act and Bihar repealed it in 2006. Other states such as Karnataka, Maharashtra etc. deregulated fruits and vegetables trade, allowed private markets, introduced a unified trading licence and have introduced a single-point levy of market fee. So, have these Reforms benefitted the farmers??

Expectation of Government	Ground Realities
Farmers allowed to Sell their produce anywhere within India	Markets located away from the villages → 90% of the Crops sold within the villages to the traders → Compelled to sell at lower prices. Poor Participation of Government agencies in procurement → farmers forced to sell to traders at lower prices → Low price realization for farmers
More Private Sector Investment in agriculture marketing.	Lack of enthusiasm among the Private sector in setting up of Market yards.
Collection of APMC levy done away with to deregulate Agriculture Marketing	Loss of revenue which otherwise could have been used for improving the infrastructure of existing APMCs. Proliferation of small unregulated private market yards which charge fee from both farmers and traders but yet do not provide basic infrastructure.
Increase in prices received by the Farmers leading to improvement in their income levels	Study conducted by National Council for applied Economic Research (NCAER) → No significant improvement in the last 13 years after the repeal of APMC Act.

This clearly shows that reforming the APMC Acts alone would not benefit the farmer. What should be done then?

- Organize Small and Marginal Farmers into FPOs so that the farmers can benefit from economies of scale. This would also ensure higher bargaining powers vis-à-vis private sector entities.
- Efficient Implementation of Agri Infrastructure Fund to improve the farm-gate infrastructure such as collection centres, storage, cold chain infrastructure etc.
- Increase the Market Density in line with recommendations of M.S. Swaminathan Committee
- Link the Trade area (farm gate, factory premises, warehouses, cold storage etc.) with the E-NAM platform.
- Improve Infrastructure in existing APMCs such as Godowns, Cold chain infrastructure etc.

2. FARMERS (EMPOWERMENT AND PROTECTION) AGREEMENT ON PRICE ASSURANCE AND FARM SERVICES ACT, 2020

MANDATE

Promote Contract Farming and ensure fair and remunerative prices

BENEFITS OF CONTRACT FARMING

- **Streamlines the supply chain by** connecting the farmers directly with the buyers and reduce post-harvest losses.
- **Enhancement of Incomes** by integrating farmers with bulk purchasers such as exporters and food processing industries
- **Access to Inputs** such as Seeds, Capital, Fertilisers, technology etc.
- **Promote higher Investment** by providing price certainty
- **Address Rural Indebtedness** by reducing dependence of the farmers on moneylenders for meeting their credit needs
- **Boost to Food Processing** by providing access to good quality raw materials and hence provide greater fillip to the sector.

POTENTIAL PROBLEMS RELATED TO CONTRACT FARMING

- **Exclusionary in Nature** due to fragmented land holdings and lower marketable surplus of small and marginal farmers; Exclude women farmers.
- **Exploitation of Farmers** due to lower bargaining power; could lead to development of Monopsony market (one buyer dealing with multiple sellers and thus benefitting buyer).
- **Adverse Impact on Environment**: Promote Monoculture farming; Promote harmful agricultural practices such as excessive water usage, fertilizer consumption; Destruction of forests and wildlife etc.

HOW TO ADDRESS THIS PROBLEM?

- Legalizing Tenancy
- Organize farmers into FPOs
- Strengthen the dispute resolution mechanism to ensure time bound resolution of disputes.

3. AMENDMENTS TO ESSENTIAL COMMODITIES ACT (ECA), 1955

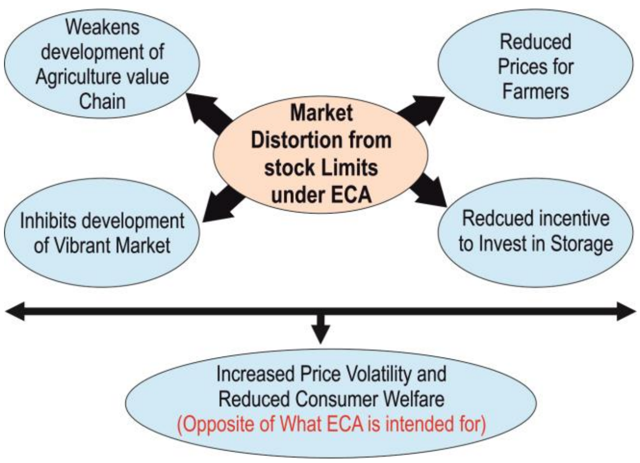
ESSENTIAL COMMODITIES ACT AND ITS RATIONALE

Used by the Government to regulate the production, supply and distribution of commodities which are declared as essential under the Act. The list of items under the Act includes drugs, fertilizers, pulses and edible oils, and petroleum and petroleum products. The Central Government may add or remove a commodity from the schedule in consultation with the State Governments.

HOW DOES IT WORK?

If the Centre finds that a certain commodity is in short supply and its price is increasing, it can notify stock-holding limits on it for a specified period. Anybody trading or dealing in a such a commodity, be it wholesalers, retailers or even importers are prevented from stockpiling it beyond a certain quantity. This improves supplies and brings down prices.

HOW ESSENTIAL COMMODITIES ACT HINDERS THE AGRICULTURAL MARKETING?



Fails to realize stocking is essential: The fear of bringing the agricultural commodities under the act has prevented the traders and processors from undertaking bulk procurement of agricultural commodities during bumper harvest season. Further, since almost all crops are seasonal, ensuring round-the-clock supply requires adequate build-up of stocks during the season.

Poor investment in Storage infrastructure: With frequent stock limits, traders have not invested in better storage infrastructure.

Adverse impact on Food Processing Industry since stock limits curtails their Operations.

Impact on agriculture exports: Whenever the Government declares an agricultural commodity as essential, it imposes a number of restrictions on it including ban of export of such commodities.

Outdated Act: This act was enacted in 1955 when we used to frequently face shortage of agricultural commodities and hence it required Government to crackdown on black marketing and hoarding and bring down the prices. However, now situation has changed completely. Now, we have surplus production of agricultural production. Hence, accordingly, we must give the necessary freedom to the traders, aggregators and food processing industries to undertake bulk procurement of the agricultural commodities.

New Announcement:

Agricultural commodities to be outside the purview of ECA; Stockholding restrictions to be imposed only under exceptional circumstances.

CRITICAL ANALYSIS OF THE AMENDMENT TO ECA

- Government's prerogative to impose stockholding limits during exceptional circumstances may deter private sector investment in supply chain infrastructure
- May give a free hand to the large traders to involve in black marketing; need to ensure this does not happen.

WAY FORWARD

Need to abolish ECA completely as recommended by Economic Survey 2019-20

►NATIONAL AGRICULTURAL MARKET (E-NAM)

Pan-India electronic trading (e-trading) portal which seeks to network the existing APMCs through a virtual platform to create a unified national market for agricultural commodities. It is operated by Small Farmers' Agribusiness Consortium (SFAC).

RECENT DEVELOPMENTS IN 2020

FPO Module on e-NAM: Enables FPOs to upload pictures of their produce directly from collection centres without the need to come to Mandis.

Warehousing based Trading Module: Farmers can sell their produce directly from the warehouses registered under warehousing Development and Regulating Authority (WDRA).

Logistics Module: Link large logistic aggregator platforms with the traders for the seamless transportation of Agri-produce.

Kisan rath application: Mobile application to enable the Farmers and Traders in hiring vehicles for transportation of agri-produce.

Integration with other platforms: e-NAM platform has been made inter operable with ReMS platform of Govt. of Karnataka. Such integration facilitates famers of either platforms to sell their produce in other platform thereby increasing their market access.

Agri-Infrastructure Fund: Financing facility to Primary Agricultural Cooperative Societies, Farmers Producer Organizations, Agriculture entrepreneurs, Start-ups, APMCs etc. to set up collection centres, cold chains, warehousing, assaying, grading and packaging units etc.

BENEFITS	CHALLENGES	WAY FORWARD
Thrust to New Farm Acts: The new farm acts enable the farmers to sell their agricultural produce directly from the trade area- Farm gate, warehouse, factory premises etc. Hence, E-NAM would provide fillip to the implementation of new farm acts. **Efficient Agri-marketing regime-** Single trading license. Single point levy of market fee, e-auction. **Benefits Farmers:** Remunerative prices, reduced transaction costs, more transparency in sale produce and prompt payment of sales proceeds **Boost FPOs:** New E-NAM Trading modules such as FPO Module, Warehousing module would save transportation costs for the FPOs. **Boost Food Processing Sector and Exports** as Processors and Exporters can directly buy the produce from farmers without any hassles **Ensures Quality in procurement** as it provides for assaying and grading of produce. **Streamlines the agricultural supply** chain, reduces logistics cost and reduces post-harvest losses **Induces transparency and competition** and prevents collusion among the traders **Ensures timely payment** directly to the bank accounts of the farmers **Ensures price stability** and prevents inflation in Agri-Commodities.	**Poor Penetration:** Only around 1000 APMCs (14%) have been integrated with e-NAM in last 5 years. In particular, larger APMCs have not been integrated. **Lack of Political will:** Some of the states have not fulfilled the criteria to join E-NAM. This is due to the fear of revenue loss due to single point levy of market fee and single trading license. **Infrastructural gaps:** Inadequate infrastructure such as such as electronic gate pass (entry and exit), quality assaying (QA) labs, electronic weighbridge; Underdeveloped IT Infrastructure; Poor Internet connectivity; Lack of financial inclusion among the farmers; Farmers need cash to meet immediate expenses. **Poor participation of Farmers:** Around 32% of the farmers are still unaware of the E-NAM; Farmers continue to sell the produce directly to traders in the villages due to - (a) Easier Credit provided by Traders (b) APMCs located far way from villages (c) Immediate cash payment **Resistance by Traders and Middlemen** as the online system is more accountable and would bring them under the ambit of tax.	**Conduct awareness programmes** among the farmers to highlight the benefits of E-NAM **Increase Funding:** Presently, Government gives Rs 75 lakh to each mandi for integrating with E-NAM. Need to provide higher funds to the APMCs to plug the infrastructural gaps. **Deploy adequate IT staff** for smooth functioning of e-NAM platform **Improve the coverage of E-NAM** in terms of integration with more APMCs and Warehouses **Reduce the dependence of the farmers** on the middlemen by organising them into FPO, set up collection centres at farm level and link such collection centres with E-NAM **Open Bank branches** on the APMC premises to get instant payments. **Establishment of an Apex Body** is advocated to control and regulate the actives of e-NAM

►PM-AASHA SCHEME

The PM-AASHA scheme aims to incentivize the farmers to produce oilseeds and pulses and to wean away the farmers from the cultivation of water-intensive crops such as Rice and Paddy. Components:

Price Support Scheme (PSS): Physical procurement of pulses, oilseeds and Copra

Price Deficiency Payment Scheme (PDPS): Compensate the farmers through DBT if the market price of the notified oilseeds falls below the MSP.

Pilot of Private procurement and stockist scheme (PPPS): Flexibility to rope in the private sector for the physical procurement of the oilseeds.

BENEFITS OF PM-AASHA SCHEME

- Address the flaws in MSP Regime: The MSP regime has been criticized on account of poor coverage in terms of crops, farmers and geography.
- Incentives the farmers to shift from water intensive crops such as Rice and Wheat and instead grow pulses and oilseeds.
- Self-Sufficiency in Pulses and Oilseeds and reduce their imports
- Provides for Mechanism for compensating farmers in the form of DBT in the event of loss.
- Reduces the burden on the Government by roping in Private sector
- Doubling of Farmers' Income by offering guaranteed MSP

CHALLENGES/CONCERNS

- Issues with the Price deficiency Payment System (PDPS): The PDPS is based on the Bhavantar Bhugtan Yojana implemented in the State of Madhya Pradesh. It was found out that in Madhya Pradesh, there was unfair collusion between traders and farmers wherein the traders asked the farmers to sell the agricultural produce below the MSP. The compensation amount given by the Madhya Pradesh government was then shared between the traders and farmers.
- Lack of enthusiasm of the private sector to undertake the procurement.
- PM-AASHA is implemented by undertaking procurement from the APMCs. But, APMCs suffer from inherent flaws such as lack of accessibility, poor infrastructure, lack of warehouses etc.

►MINIMUM SUPPORT PRICE (MSP) REGIME

The Cabinet Committee on Economic Affairs (CCEA) notifies MSP based on the recommendations of the Commission on Agricultural Costs and Prices (CACP). These recommendations are made separately for the Kharif marketing season and the Rabi marketing season. Post harvesting, the government procures crops from farmers at the MSP notified for that season, in order to ensure remunerative prices to farmers for their produce. As of now, CACP recommends MSPs of 22 commodities, which comprise 7 cereals (paddy, wheat, maize, sorghum, pearl millet, barley and ragi), 5 pulses (gram, tur, moong, urad, lentil), 7 oilseeds (groundnut, rapeseed-mustard, soyabean, seasmum, sunflower, safflower, nigerseed), and 3 commercial crops (copra, cotton and raw jute).

HOW ARE THE MSPS FIXED?

The CACP considers various factors such as the cost of cultivation and production, productivity of crops, and market prices for the determination of MSPs.

Different methodologies may be used to calculate the MSPs. These are

- **A2 Approach,** which includes cost of inputs such as seeds, fertilizer, labour;
- **A2+FL Approach**, which includes A2 and the implied cost of family labour (FL); and
- **C2 Approach**, which includes the implied rent on land and interest on capital assets and A2+FL.

Hence, C_2 approach is considered to be the most comprehensive approach which can be used to calculate the MSP. The National Commission on Farmers led by M.S. Swaminathan had recommended for the adoption of C2 Approach for fixing the MSP. However, presently, the MSPs are fixed at least 50% more than cost of production as calculated according to A2+FL approach.

LIMITATIONS IN THE MSP REGIME

The MSP Policy of the Government has come under immense criticism on account of number of reasons. These flaws with the MSP regime have been highlighted by number of committees such

as the Committee on Doubling Farmers' income which was headed by Ashok Dalwai. Some of these fundamental flaws include:

Promoted Cultivation of Water Intensive Crops: Even though, the Government declares MSP for 22 crops, the procurement is quite strong only for Rice and Wheat. The procurement of other

commodities, particularly Pulses and Oilseeds is quite lower.

Lack of Safeguards: The present MSP regime is not geared to pay compensation to the farmers when they are forced to sell the agricultural commodities in the open market below the MSP.

Flawed Approach: It has been stated that the fixing of MSP based on A2+FL approach would lead to declaration of lower MSP and hence does not adequately compensate the farmers. Accordingly, some of the economists have pointed out that the MSP should be declared based on the C2 Approach as recommended by Swaminathan Committee.

Benefitted only Large Farmers: The Shanta Kumar Committee on FCI reforms has highlighted that the MSP procurement has benefitted only 6% of farmers in India. Hence, only the large farmers which higher surplus of agricultural commodities have got benefitted from MSP.

The Small and marginal farmers who comprise of almost 83% of the farming community have failed to get benefitted from the MSP regime.

Undue delay: In some of the cases, the Government has not been able to declare the MSPs as per the schedule. These delays in the announcement of the MSPs have not able to able to send the price signals to the farmers on time.

WAY FORWARD FOR AGRICULTURAL MARKETING

The European Union, consisting of multiple countries, has been able to set up Common Market for all products by eliminating all forms of trade barriers. In this regard, India would also be able to reap benefits by setting up a "Single Market". Agricultural marketing is a State subject. Hence, in this regard, the National Commission on Farmers (NCF) headed by M.S. Swaminathan had recommended that agricultural marketing be placed under the Concurrent List. Even the Committee on Doubling Farmers' Income (DFI) had argued for placing agricultural marketing under the Concurrent List.

►LEGALIZATION OF MSP - PROS AND CONS

The recently passed farm acts has ignited the debate about Legalization of MSP. The farmer groups have been demanding for the legal sanctity of the MSP to prevent exploitation by private sector. The Government has assured the farmers that MSP would continue but it is not ready to provide legal status to MSP.

Present Status of MSP: Presently, MSP does not enjoy statutory recognition. This means that, there is no onus on the private sector to buy at MSP. Legalization of MSP would ensure that private sector would buy commodities at MSP. Failure to do so would attract penalty.

NEED FOR LEGALIZATION OF MSP

Enhancement in Income Levels: Even through the Government declares MSP; procurement is quite limited to certain crops and certain regions. Most of the farmers sell commodities below MSP in the open market to the traders and middlemen.

Address challenges due to Farm Acts: The recent passed farm acts may lead to the exploitation of the farmers, wherein companies may procure commodities from them below MSP.

CHALLENGES AND CONCERNS

Goes against Interest of Farmers:

- In the event of bumper harvest, prices of the commodities would fall below MSP. During such times, the private sector may not procure the commodities fearing penalty.
- Higher procurement of Food grains by FCI → Surplus stock → Dumping of surplus in open market → Decrease in prices→ Traders would buy commodities from FCI and not farmers.
- Legalization of MSP→ Encourage over-production of Rice and Wheat→ Environmental cost (such as Decline in Soil fertility, depletion of ground water etc.) → Decline in income levels of farmers.

Adverse Impact on Economy:

- Higher costs of procurement due to a statutory MSP will increase the food prices, leading to inflation in the economy
- Higher prices of commodities would adversely affect exports of agricultural commodities

Financing needs: According to some estimates, if the Government were to procure all the 23 crops at MSP, it would amount to half of the Government's Budget.

Unsustainable Food grain Management Policy: The Food subsidy bill has already become quite unsustainable at around Rs 2 lakh crores. The excess procurement of food grains by the FCI has led to surplus buffer stocks leading to higher storage costs and wastages. Legalization of MSP would further worsen the scenario.

Administrative Challenge: lack of government machinery to the procure all crops that are under the MSP system.

Violation of WTO Agreement on Agriculture (AoA): Legalization of MSP would further violate the limit on the subsidies under AoA and it can be challenged by other countries. India's quest for Permanent solution on public stockholding could be in jeopardy.

Promote Inequality: Only 6 per cent of farmers are able to benefit from the MSP. Similarly, most of the Rice and Wheat are procurement from states such as Punjab, Haryana, MP etc. Hence, legalisation of MSP could worsen socio-economic inequality and promote regional disparity.

Environmental cost: Encourage farmers to grow more rice and wheat leading to further environmental problems.

Adverse Impact of Government's Intervention: In any free-market economy, the price of any goods and services produced in the country must be decided by market forces and not by the state. As highlighted by Eco Survey 2019-20, Government's intervention, sometimes though well intended, often ends up adversely affecting the market. For example, the regulation of prices of drugs through the DPCO 2013, has led to increase in the price of a regulated pharmaceutical drug vis-à-vis that of a similar drug whose price is not regulated.

►COUNTERING AGRARIAN CRISIS IN THE GREEN REVOLUTION STATES

The crux in the recent farmers' protests is over the continuation of Rice-wheat cropping system in the Green Revolution states. This is evident in the farmers' demand for guaranteed MSP for these crops. However, the agrarian crisis in these states cannot be countered through MSP, but through Diversification.

The Green Revolution in Punjab and Haryana has led to unintended consequences in the form of - Environmentally unsustainable Rice-Wheat cropping system (more than 80% of area) and decline in the annual growth rate of income levels to below 1% (National -3%). The agricultural income per hectare in Punjab is only around Rs ***1.5 lakhs in comparison to other states Andhra Pradesh and Tamil Nadu (Rs 2.25 lakhs)***. This is clearly on account of 3 reasons- ***Rising input costs, lower productivity and lower prices received by the farmers through the Rice-Wheat Cropping system***.

Punjab and Haryana are blessed with better irrigation facilities (more than 90%), higher average land holding size (3.62 ha), higher fertiliser consumption (212 kgs/ha) accompanied by strong agricultural infrastructure. These opportunities have to be leveraged to address the second-generation problems caused by the Green Revolution and double the income level of the farmers.

RECOMMENDATIONS OF MONTEK SINGH AHLUWALIA COMMITTEE APPOINTED BY PUNJAB GOVERNMENT

- Reduce area under Paddy and diversify towards high-value crops such as fruits and vegetables (Dalwai Panel- Increase in agri. diversification by 1 ha leads to increase in income by Rs 1 lakh).
- Special package from the Centre to compensating any possible loss.
- Focus on Secondary Agriculture- Boost to Food Processing Industries, Employment, Forward-Backward Linkages, Reduce Post-harvest losses.
- Promote cultivation of Pulses and Oilseeds through guaranteed procurement under PM-AASHA.
- Rationalise subsidies and divert the savings towards diversification and improving the supply chain management.

The Government has to now focus on Rainbow revolution - horticulture, animal husbandry, poultry, fisheries, food grains etc in these states. This would have multiple benefits- nutritional and food security, income enhancement and make agriculture more inclusive and sustainable.

►INVERSE FORK-TO-FARM STRATEGY

The Strategy to double income level of farmers requires three-pronged approach of - Reducing input costs, enhancing productivity and Ensuring higher prices for the farmers. To ensure higher prices for the farmers, the Dalwai Panel has recommended that the agricultural marketing should guide the flow of produce from farm-to-fork, through the flow of information from fork-to-farm. Hence, in a way, there is a need to focus on Inverse "Fork-to-Farm" strategy.

UNDERSTANDING FORK-TO-FARM STRATEGY

To ensure higher prices for the farmers, we have so far used "Farm-to-Fork strategy" to streamline the agriculture supply chain, reduce number of intermediaries, cut down post-harvest losses and connect farmers directly with the consumers. However, this strategy has solely focused on enhancing production without understanding the prevailing demand and prices in the market.

For example, Inspite of the fact that horticulture crops such as Fruits and vegetables are in much higher demand and fetch higher prices, the farmers continue to grow water-intensive crops such as Rice, Sugarcane, Wheat. The area under horticulture is hardly around 14%, even though it contributes more than 33% of agricultural GDP.

Similarly, even today, India has remained a net importer of Pulses and Oilseeds due to lower production. Hence, in a way, even though Indian Agriculture has made rapid strides in term of production, it has not led to commensurate increase in the income levels of the farmers.

	Farm-to-Fork Strategy	Fork-to-Farm Strategy
Approach used	Production led Approach	Market led Approach
Strategy	Sale of agricultural commodities in the market to ensure remunerative prices for	Undertake cultivation of crops based upon prevailing demand.

	farmers	
Flow of Information	From farm to Market (Production related Information)	From Market to Farm (Demand related Information)
Integration of demand with Supply	Poor Integration	Higher Integration. Production based upon demand.
Prices received by Farmer	May be lower	Higher

Hence, Dalwai Committee has recommended adoption of inverse "Fork-to-Farm" strategy to bring about a **strategic shift from production-based push into markets towards a demand-based pull.** This approach focuses on reverse flow of information from markets to farmers would also enable the farmer to take informed decisions about what to market, when to market and to whom.

BENEFITS OF FORK-TO-FARM STRATEGY

This approach focuses on reverse flow of information from markets to farmers would also enable the **farmer to take informed decisions about what to market, when to market and to whom**.

The new strategy would benefit Indian agriculture in a multi-faceted manner:

- Promote diversification of Indian Agriculture towards high value crops and allied sector.
- Enable Agriculture to cater to shift in consumption pattern towards protein-based foods such as Pulses, Egg, Fish, Meat etc.
- Ensure higher prices for the farmers and reduce risk.
- Ensure both Food security as well as nutritional security.
- Prevent Inflation in Agri commodities
- Enable us to boost exports according to international demand and capture newer markets.

►AGRICULTURE VALUE CHAIN AND RURAL INFRASTRUCTURE

Rural infrastructure is critical for stimulating the rural economy and achieving the UN SDGs by 2030. Studies reveal that a 1% increase in the stock of infrastructure is associated with a 1% increase in gross domestic product (GDP) across countries

ROLE OF INFRASTRUCTURE IN DOUBLING FARM INCOME

Roads: Provide easy access to markets and connect farms with industries as well as consumers which can help farmers to realise better prices for their produce.

Electricity: Boost agro industries as well as food processing industries.

E-infrastructure: Provides access to Virtual Agri markets, helping farmers to know real time pricing of crops. It can also be instrumental in providing early warnings, reducing crop losses and claiming insurance.

Cold storage facilities: Reduce post-harvest losses and increase shelf life thereby releasing better income.

Irrigation: Especially micro irrigation can boost productivity and reduce unnecessary losses thereby increasing profit margins of farmers.

Banking infrastructure: Ensure credit accessibility and can help financial inclusion which is one of the main ways towards enhancing income.

Current situation: Rural India suffers from an infrastructure deficit such as access to Irrigation, 24X7 Electricity, roads, rural markets, warehouses, cold chain, farm machinery hubs etc. For example, Dalwai Committee has highlighted that we need around 3,500 markets. Similarly, lack of an adequate and efficient cold chain infrastructure leads to massive post-harvest losses of around Rs 90,000 crores on an annual basis.

INITIATIVES TAKEN BY GOVERNMENT

Agri Infrastructure Fund: Improve the farm-gate infrastructure such as collection centres, storage, cold chain infrastructure etc. This fund would provide necessary funding support to APMCs, Primary Agricultural Cooperative Societies, Farmers Producer Organizations, Agriculture entrepreneurs, Start-ups, etc. to invest in post-harvest management infrastructure.

Gramin Markets (GrAMS): Develop the existing 22,000 Rural Periodic Markets (RPMs) into Grameen Agriculture Markets (GrAMs) to offer better market access to small and marginal farmers.

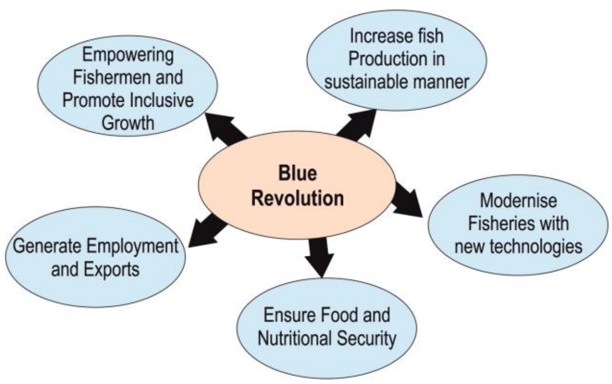
SAMPADA Scheme: Supplement agriculture by modernising processing activities and decreasing agri-waste.

Operation Greens: To promote Farmer Producers Organizations (FPOs), agri-logistics, processing facilities. Recently, the mandate of the scheme has been extended from TOP (Tomato, Onion and Potato) to TOTAL (All Fruits and Vegetables).

ALLIED SECTOR

►FISHERIES- BLUE REVOLUTION

India is the second largest producer of fish and also second largest aquaculture nation. It employs around 16 million fish farmers at primary level and almost twice the number at higher value chain. Its contribution to GDP has increased from 0.40% in 1950-51 to 1% in 2017-18. However, only 78% of marine and 58% of inland fisheries potential is presently harnessed. In order to realize full potential, Government has launched Blue Revolution with multi-faceted objectives.



CONSTRAINTS IN THE GROWTH OF FISHERIES SECTOR

Marine Capture Fisheries: Limited scope for expansion due to overcapacities in territorial waters, inefficient management and prevalence of traditional fishing practices. Inadequate infrastructure especially fishing harbours, landing centres, cold chain and distribution systems, poor processing and value addition, wastage, traceability and certification, non-availability of skilled manpower, etc.

Inland Capture Fisheries: Seasonal nature of fishing operations, depleted stocks in natural waters, use of obsolete technology for harvesting coupled with low capital infusion

Culture Fisheries: Lack of Species diversification, lack of emphasis on new forms of culture fisheries such as cold water fisheries, ornamental fisheries, rice-cum-fish culture system, waste water aquaculture; Poor physical condition of resources (specially the water quality and quantity), lower productivity, increased incidents of disease, low levels of investment, inadequate access to institutional credit and high cost of credit, inadequate infrastructure for pre-production, production, post-harvest and processing facilities, low adoption of technologies and shortage of skilled manpower in aquaculture and extension services

Details about Pradhan Mantri Matsya Sampada Yojana: Address critical gaps in fish production and productivity, quality, technology, post-harvest infrastructure and management, modernization and strengthening of value chain, traceability, establishing a robust fisheries management framework and fishers' welfare.

STRATEGIES TO BE ADOPTED TO BOOST BLUE REVOLUTION

- **Horizontal Expansion in untapped areas** like Brackish aquaculture, cold water fisheries, Pond aquaculture, Reservoirs, canals, ornamental fisheries, Recreational fisheries.
- **Vertical Expansion** through diversification of culture species; Integrated farming system; rice-cum-fish culture system; wastewater aquaculture system, Organic aquaculture.
- **Restoration of natural productivity and conservation** of indigenous fisheries resources through ecosystem restoration to boost riverine fisheries
- **Address stagnation in Marine fisheries** through deep sea fishing, Mariculture, open-sea cage farming etc.
- **Upgradation** of fishing fleet
- Organize **fishermen into FPOs and fishing village communities into VPOs** to reap economies of scale and promote value-addition
- Address problems of **seed, feed and health.**
- **Enhancing extension** through Sagar Mitras.
- Address **technical and managerial gap** in shrimp farming through FDI
- Development of **fisheries post-harvest infrastructure** especially modern markets, cold storages, processing plants etc. through PPP
- **E-markets and e-trading of fish** and fish products will be encouraged and promoted
- **Ecological certification** of fisheries to boost exports

Fisheries sector has been registering highest growth rates in production and providing livelihood and nutritional security in the country. Hence, it needs to be treated on par with agriculture and should be incentives/ concessions as in agriculture like financial assistance for technological upgradation, power supply, loan facility, Insurance, marketing assistance etc.

►BEEKEEPING/ SWEET REVOLUTION

The scientific practice of Beekeeping (Apiculture) has the potential to promote eco-friendly and sustainable agriculture along with higher yields leading to increase in income levels of farmers. Hence, just like White Revolution, the Sweet Revolution can act as a major tool to promote socio-economic development.

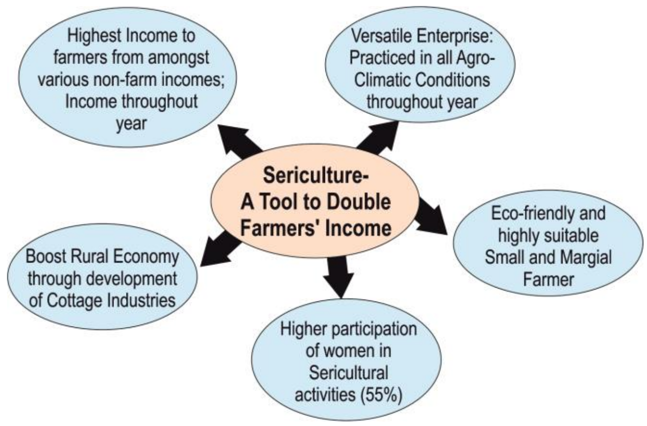
Beekeeping has great potential for the small and marginal farmers, landless labourers etc. on account of following reasons:

- **Increases crop yields** by 20-30% through cross pollination.
- **Additional source of income** for paid pollination service
- **Less capital Intensive** and hence can be practiced by poor farmers
- Requires **no land** and can be practiced by landless labourers
- **Other products** such as bee pollen, bee-venom costlier than honey
- **Nutritional Security**: more than a third of the global food basket is comprised of bee pollinated crops
- Growing demand for honey in overseas market and hence scope for more **export earnings**

Hence, the Government has launched Honey Mission to harness potential of Sweet Revolution. Going forward, beekeeping should be considered as input of agriculture, which could enhance efficacy of other inputs and accordingly training should be provided to farmers.

►SERICULTURE

Sericulture is cottage-based Industry which broadly encompasses four Independent activities- Mulberry cultivation, silkworm rearing, silk reeling and weaving, printing and dying. Being less Capital intensive and more labour Intensive, Sericulture can boost rural economy as shown below:



CURRENT SCENARIO OF SERICULTURE INDUSTRY IN INDIA

Production: India has the unique distinction of being the only country producing all kinds of commercially exploited natural silks namely, Mulberry, Eri, Muga, Oak Tasar and Tropical Tasar. However, mulberry silk is the dominant one and contributes to about 70 per cent of the country's raw silk production. India is the second largest producer of silk in the world after China. China and India together account for about 98 per cent of the global raw silk production.

INITIATIVES OF THE GOVERNMENT

- Establishment of Central Silk Board as a statutory body
- Silk Samagra" an integrated scheme for development of silk industry with the following 4 components- R&D, Seeds, Market development, Quality Certification
- Sericulture included as agriculture allied activity under RKVY. This enables the sericulturists to avail the benefits of the scheme for the entire sericulture activities up to reeling.
- Forest Conservation Act has been amended to treat non mulberry sericulture as forest-based activity enabling the farmers to undertake Vanya silkworm rearing in the natural host plantation in the forests.
- North East Region Textile Promotion Scheme (NERTPS): Under this scheme, 38 Sericulture projects are being implemented in all North Eastern States
- Anti-dumping duty on Chinese raw silk
- Production of Bivoltine Silk: Bivoltine silk is the high-quality mulberry silk produced in India as an import substitute silk. R&D has been focused to evolve productive bivoltine hybrids and package of practices for production of high quality bivoltine silk in the country.
- MGNREGA guidelines to enable sericulture farmers to avail assistance under the scheme.

Challenges: Decline in area under Mulberry cultivation; Irrigation facilities are available only for 50 per cent of mulberry area; Lower yield of Cocoon; Declining organic carbon level with adverse effects of excessive use of chemical fertilizers and pesticides on soil health; Inadequate supply of quality eggs; Emergence of new pest and pathogens; Improper rearing conditions including mounting and post-harvest care ; Non-availability of sufficient automatic reeling units.; Availability of low-cost synthetic textiles; Import of Cheap silk from China, Vietnam etc.

STRATEGIES NEEDED

Expansion of mulberry area to new districts of traditional and non-traditional sericulture states.

Enhancing the egg production capacity: 95% Chinese silk produced from highly productive bivoltine type in comparison to 80% Indian silk produced from low productive cross breed.

Enhancement of Automatic Reeling Capacity: Reeling of Silk through traditional devices results in large variation in quality and uniformity making it unsuitable for power looms.

Diversification of silk into other material uses and new fabrics

R&D into medicinal and other applications of sericulture by-products

Anti-dumping measures need to be maintained

►ANIMAL HUSBANDRY AND DAIRY

Animal husbandry output constitutes about 30 percent of the country's agricultural output. Women constitute 70 per cent of the labour force in livestock sector as against 35 per cent in crop farming. Further, most of the livestock is concentrated in dry land areas and with small and marginal farmers, development of animal husbandry is considered to be more **egalitarian and inclusive.**

IMPORTANCE OF LIVESTOCK IN RURAL ECONOMY: Source of Subsidiary Income; Nutritional Security; Social Security; Depend upon bullocks for ploughing, carting and transport of both inputs and outputs;

CONSTRAINTS AND CHALLENGES: Shortage of Feed and fodder (only 4% of land categorized as Pasture land); Frequent occurrence of deadly diseases such as Foot and Mouth Diseases; Underdeveloped Livestock markets; Livestock extension grossly neglected; Lack of International processing Standards hindering export of meat; Poor coverage of livestock insurance; Poor coverage of Artificial Insemination

STRATEGIES NEEDED

- **Prioritization of breed:** Select economically important breeds in order to develop the dairies. To sustain the improved productivity of crossbreds and to minimize the decline in reproductive performance, there is a need to develop the sustainable breeding strategy.
- **Address Shortage of Male Germplasm/Breeding Bulls by** identifying more high genetic merit bulls

  Address Acute Shortage of feeds and fodders by effectively implementing National Livestock Mission (NLM)
- **Skilled Human Resource Development** to enhance extension service

  Development of Dairy Entrepreneurs by providing cheaper access to credit, handholding support etc.
- **Strengthening Dairy Development Extension Programmes**: The dairy development in India demands a networking of various extension activities as the milk procurement is based on different milk shed areas where, the dairy stakeholders are the custodian of different breeds of indigenous and crossbred cattle.
- **Effective implementation** of Rashtriya Gokul Mission and Rashtriya Kamdhenu Aayog for development and conservation of indigenous bovine breeds
- **Organizing farmers into FPOs** and focus on diversification towards low-cholesterol ghee, low fat butter, flavoured milks, ice-creams etc.
- **Promotion of Contract farming:** Contract farming in Poultry sector and Dairy sector have been successful in some of the states such as Punjab. For example, NESTLE's association with the farmers in the Punjab for the procurement of milk has been responsible for socio-economic transformation. There is a need to adopt such models across India.

►POULTRY SECTOR

India is the one of the world's largest producer of eggs and broiler meat.Approx. 75 percent of egg production is contributed by commercial poultry farms, remaining comes from household/backyard poultry. Total poultry feed production of the country stands at 22 million tonnes. The Indian poultry sector is valued at INR 1 lakh cr or USD 15.38 bn.

CHALLENGES

- Poor infrastructure for export is hindering the export of poultry products.
- Competition from international players on opening up duty-free imports, lifting of trade barriers.
- Increasing propaganda and demonstrations by organizations on promoting vegetarianism and Animal rights.
- Occurrence of Salmonella and other diseases in poultry meat.
- Many countries are dumping their poultry products i.e. exporting eggs at prices lower than production cost.
- Many countries are protecting their poultry industry from foreign competition by protective measures like restricting imports, keeping egg prices at lower level etc.
- Stiff competition from Sri Lanka, Pakistan, Brazil and France, all these countries provide subsidies, export incentives to exporters, and keep their price low.
- High Maize & Soya price fluctuation leading to availability issues of poultry feed at reasonable prices.
- Small farms, losing out on economies of scale and biosecurity.
- Lack or undefined standards leading to impending cheaper imports.
- Avian influenza and other emerging/re-emerging diseases.

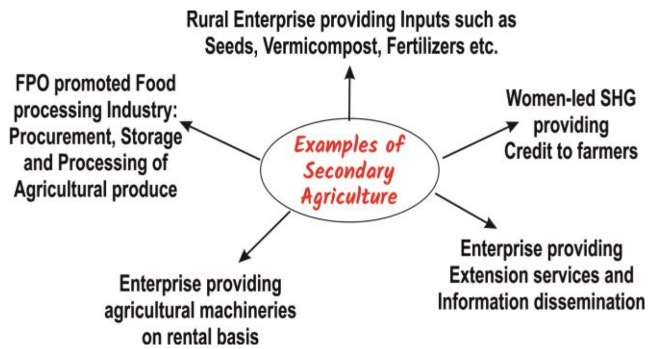
RECOMMENDATIONS

- Processing need to be encouraged as presently only 6% of the poultry products is processed. Block/ District level cold storage needs to be established and cold chain needs to be developed.
- Encourage brand development for certain indigenous poultry like Kadaknath or other birds with some specific attributes.
- Intensify education and awareness about nutritive value of eggs and poultry through various platforms like World Egg Day etc.
- Intensify skill development in the poultry sector and reduce the gap required.
- Develop Marketing Intelligence domestically and internationally in collaboration with ICAR and other Department/ agencies.
- Facilitate Industry- Academia partnership so as to enable transfer of technology at the grassroots level.

IMPORTANT TOPICS

►NEED TO BOOST SECONDARY AGRICULTURE

According to Dalwai Panel, Secondary agriculture is defined as cottage Industry that (a) utilises agricultural products as raw material (b) deploys locally available skills to produce goods and services; and (c) can be categorised appropriately as MSME.



PHILOSOPHY BEHIND SECONDARY AGRICULTURE-HARNESSING STRUCTURAL TRANSFORMATION IN RURAL AREAS

The share of non-farm income in rural areas has increased from 25% in 1970s to 70% in 2015, while the share of employment in non-farm has increased from 23% to 35%. The rural areas account for 95% of agricultural output, 50% of Manufacturing and 25% of services sector output. The share of rural areas in manufacturing output has doubled in sixty years, without an associated increase in share in the workforce. Thus, there is the need to strategically promote the right kind of development in manufacturing and services sectors, that will generate employment. Thus, there is the need to strategically promote labour-intensive cottage-based manufacturing and services sectors to support Indian Agriculture, boost employment creation and transform rural areas.

BENEFITS

__Holistic development of rural areas__ by transforming rural areas from consumers to producers of Goods.

Efficient utilisation of resources such as land and labour through various activities such as honeybee keeping, mushroom cultivation, backyard poultry etc.

Contributes to agriculture by providing Inputs, enhancing productivity and reducing post-harvest losses.

Develop human and capital resources to replicate Start-up India at village level.

SPECIAL SUPPORT NEEDED FOR SECONDARY AGRICULTURE

- Priority sector status for institutional credit.
- Low-cost skilling and knowledge-based exposure.
- Specialised extension services for enterprises owned by females.
- Priority under rural electrification objectives.
- Fast track procedures to avail benefits under ongoing central sector and centrally supported schemes.
- Geographical Indicator labels to products from village scale secondary production.

Secondary agriculture would need to be promoted by providing enterprise level support, which can be undertaken by initial setting up of a Division on Secondary Agriculture & Enterprises in all three Departments of the Ministry of Agriculture and Farmers' Welfare and coordinate their efforts through a structured platform.

►GAP APPROACH IN AGRICULTURE

According to FAO, Good Agricultural Practices (GAP) are "practices that address environmental, economic and social sustainability for on-farm processes, and result in safe and quality food and non-food agricultural products". It involves practices such as Zero tillage, Integrated Watershed Management, Precision farming, Integrated Production and Pest Management (IPPM) etc.

The GAP approach would enable efficient utilisation of agricultural inputs, boost productivity and thus promote environmental sustainability in the following manner:

Soil: Crop rotation, conservation tillage, Mulching, rational application of fertilizers etc.

Water: Techniques to monitor water requirements, rainwater harvesting, aquifer management, micro-irrigation etc.

Animal health: Availability of pasture, promoting animal health through vaccination and treatment of ailments.

Crop Production: Choosing crops according to agro-ecological conditions, market acceptability and nutritional value; Crop rotation, Inter

cropping etc.

Reducing Post-harvest losses: By storing food products under hygienic conditions.

Energy and waste management: Using alternative energy sources such as solar and wind; recycling of wastes etc.

Hence, there is a need to develop a system of auditing and certification of GAP in India so that it contributes to meeting environment and social development objectives.

►DEFINITION OF FARMER

The Government has a vision to double the income levels of the farmers by the end of 2022. However, there seems to be ambiguity as to who constitutes farmers in India.

Usually, the Government considers a farmer as a person who owns land and possesses a record of right (RoR) that offers him benefits under the Government schemes and access to institutional credit.

This definition is discriminatory and exclusionary on account of

Exclusion error: Excludes tenants, sharecroppers, agricultural labourers and tribal families involved in shifting cultivation and collection of Minor Forest produce. For instance, the PM-KISAN scheme provides income support only to the land-owning families.

Inclusion error: Not all landowners may be actual cultivators.

Discriminatory: Since the land is rarely registered in the name of women, these women farmers (accounting for 30% of farmers) fail to get benefits.

Thus, as recommended by M.S. Swaminathan Committee almost everyone involved in agricultural related activity should be considered as "farmer". Such a broad-based definition must be in turn integrated into the design of our agricultural policies and schemes to ensure inclusive growth.

►AGRICULTURAL EXPORTS- A TOOL TO DOUBLE FARMERS' INCOME

The agriculture exports policy, 2018 has emphasized on "Bake in India" i.e., a renewed focus on value addition and on processed agricultural products.

PRESENT STATUS OF AGRI-EXPORTS

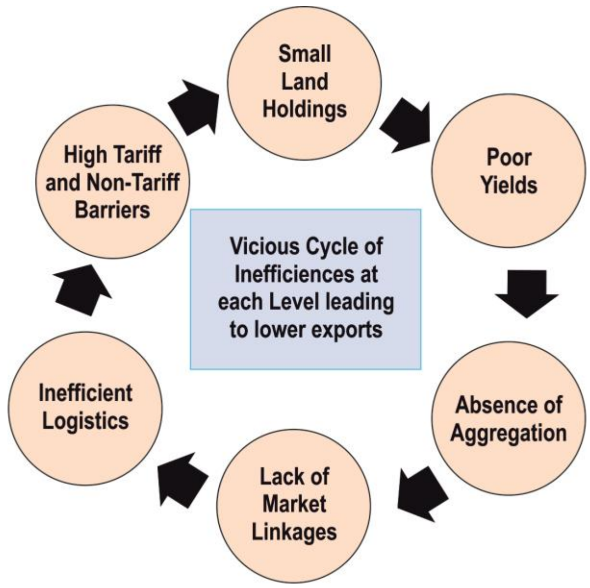
1. **Lower share of Global Exports:** In spite of being one of the largest producers of Food grains and Fruits and vegetables, India's share in global export of Agri-commodities stand at merely 2% (9th Rank).
2. **Lack of Diversified Export basket**: India's export basket is basically dominated by Basmati Rice and Marine Products
3. **Low Value addition:** Majority of its exports are low value, raw or semi-processed.

AGRICULTURAL EXPORTS POLICY 2018

- Double agricultural exports from present ~US$ 30+ Billion to ~US$ 60+ Billion by 2022 and reach US$ 100 Billion in the next few years
- Diversify our export basket, destinations and boost high value- and value-added agricultural exports including focus on perishables.
- Promote novel, indigenous, organic, ethnic, traditional and non-traditional Agri products exports.
- Provide an institutional mechanism for pursuing market access, tackling barriers and deal with sanitary and phytosanitary issues.
- Strive to double India's share in world Agri-exports by integrating with global value chain at the earliest.

CONSTRAINTS AND CHALLENGES

The Agricultural Exports Policy 2018 has sought to double agricultural exports from present ~US$ 30+ Billion to ~US$ 60+ Billion by 2022 and reach US$ 100 Billion in the next few years. However, it would face number of challenges



- **Supply-side:**
  - **Lack of stable and reliable export policy**. More focus on price stabilization and food security and not on exports.
  - **Lack of Market Intelligence** related to consumer preference in export markets. For example, higher sweetness in Indian mangoes is not necessarily in demand in many countries.
  - **Identification Challenges:** Absence of state level export data precludes us from identifying potential export clusters within a state to provide suitable incentives.
  - **Lack of aggregation of low marketable surplus** due to significant variation in terms of varieties cultivated.
  - **Training and Skill Development:** Unregulated chemicals usage; Inadequate post-harvest management; Lack of awareness leading to rejection of Indian Products in overseas market.
  - **Fragmented and restrictive APMC** regime
  - **Poor Infrastructure and Logistics** makes Indian products uncompetitive.
  - **Lack of** coordination among multiple agencies involved in export of Agri-commodities such as

Ministry of Agriculture, Commerce Ministry, FSSAI etc.

- **Demand-side:**
    - High import duties and Quota limits in export markets
    - Indiscriminate application of sanitary and phytosanitary measures by other countries against Indian products.
    - Surge in agricultural imports after signing of FTAs

Recommendations of the High-Level Expert Group (HLEG) to boost Exports

- State-led Export Plan - Business plan for a crop value chain cluster. Plans should be collaboratively prepared with private sector players and Commodity Boards.
- Focus on 22 crop value chains through a demand driven approach.
- Private sector should play an anchor role in driving outcomes and execution.
- Centre should be an enabler.
- Centre should enable state-led plans
- Robust institutional mechanism to fund and support implementation.
- Funding through convergence of existing schemes, Finance Commission allocation and private sector investment.

►ZERO BUDGET NATURAL FARMING: PROSPECTS, CHALLENGES AND CONCERNS

The Economic Survey 2018-19 focused on adoption of 'Zero Budget Natural Farming' (ZBNF) in order to double the farmers' income by the end of 2022. However, some of the critics have pointed out that the Government's policy of inclusion of ZBNF is unwise and imprudent.

BASIC PREMISE AND PILLARS OF ZNBF

The ZBNF, put forward by Subhash Palekar, focusses on **farming without credit** (Zero Budget) and **Farming with Nature** without using Chemicals (Natural Farming).

Basic Premise: Soil has all the necessary nutrients which could be made available through the intermediation of microorganisms; Against chemical fertilizers; low cost, low level of inputs and limited reliance on externally purchased inputs.

FOUR PILLARS OF ZBNF

Jivamrita/jeevamrutha: Fermented microbial culture prepared using cow dung and urine to provides nutrients to the soil, acts as a catalytic agent to promote the activity of microorganisms in the soil.

Bijamrita/beejamrutha: Protection of the young roots from various diseases through cow dung and urine.

Mulching: Conservation of the soil moisture by covering the top layer of the soil with dried biomass, organic manure etc.

Moisture: It challenges the basic notion that plants need more amount of water and instead focuses on conservation of soil moisture and promoting less irrigation.

Other important pillars are- Intercropping, Rainwater harvesting, Revival of the soils through earthworms etc.

Government's Initiatives to promote ZBNF: Under the RKVY-RAFTAAR and Paramaparagat Krishi Vikas Yojana, States allowed to use their funds to promote the ZBNF.

BENEFITS

- Reduce the input costs responsible for present agrarian distress.
- Reduce the dependence of the farmers on the credit responsible for the debt trap.
- Enhancement in the soil fertility.
- Optimum utilization of water and reduce water consumption (85%)
- Promote diversification of the agriculture- towards other crops and towards livestock rearing. This can also lead to reduction in the risks and enhance non-farm income.
- Enhance the farmers' income in the long term.

CHALLENGES AND CONCERNS

A group of agricultural experts from the Natural Academy of agricultural sciences (NAAS) have questioned ZBNF on multiple grounds.

Lack of Independent and Scientific studies to validate the claim that the yields through the ZBNF are much higher.

Based on Unscientific Premise since it erroneously assumes that the soils have all the necessary ingredients

One-Size fits all approach: In some regions of the country, the soils are either acidic or saline and, in some regions, the fertility of the soil has reduced due to heavy metal pollution.

Flawed Nutrient Management: The ZBNF believes that plants obtain 98.5% of the nutrients from the air and the remaining 1.5% from the Soil. The nutrients cannot be made available only through cow dung and urine.

Incurs costs: Not essentially "Zero Budget" since some of the inputs need to be purchased. Agricultural inputs which may have implicit cost such as the imputed value of family labour not considered.

According to experts, replacing all farming with ZBNF could decrease crop production by 50% and thus severely affect both **food security as well as income of farmers**. Hence, the Government must adopt evidence-based approach and must not hastily promote ZBNF without multi-agroclimatic location studies, and scientific validation of long-term impact and viability of ZBNF.

►FARMER PRODUCER ORGANIZATIONS (FPOS)- GAME CHANGER TO ALLEVIATE AGRARIAN DISTRESS

Recently, PM Modi has launched a campaign to set up 10,000 FPOs across India in the next 5 years. The FPOs can build social capital and promote economic democracy at the grassroots level. The success of FPOs may in turn lead to "Second Green Revolution" and bring about rural transformation.

WHAT IS FARMERS PRODUCER ORGANISATION (FPO)?

A Producer Organisation (PO) is a legal entity formed by primary producers such as farmers, milk producers, fishermen, weavers, rural artisans, craftsmen etc. FPO is a type of PO where the members are farmers. The FPOs can be registered as Cooperatives (under Cooperative Societies Act of the respective State), Farmer Producer Company (Under Companies Act, 2013) or Societies (under Society Registration Act, 1860).

HOW FPCS BENEFIT SMALL AND MARGINAL FARMERS?

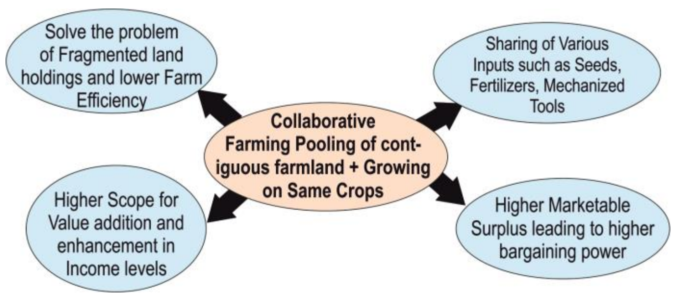
- Facilitate land pooling and address problems associated with fragmented landholdings
- Reap economies of scale for buying of inputs and selling the agricultural produce
- Enable sharing of services such as knowledge input, production supervision, storage, transportation, etc and hence reduce the transaction costs
- Create opportunities for farmers to get more involved in value addition activities such as input supply, credit, processing, marketing and distribution.
- Provide interface between the farmer and global market enabling them to export commodities
- Provide access to capital for farmers and manage risk for farmers through diversification
- Promote economic democracy at the grass root level.

Initiatives for the Promotion of FPOs: The SFAC is the nodal agency at the national level for the creation of FPOs. The SFAC operates a Credit Guarantee Fund to mitigate credit risks of financial institutions which lend to the FPCs without collateral. SFAC also provides matching equity grant up to Rs. 10 lakh to double the share capital of FPCs. NABARD also provides financial support to the FPOs through two dedicated funds - "Producers Organization Development Fund (PODF)" and PRODUCE Fund (Producers' Organization Development and Upliftment Corpus) to promote new FPOs and support their initial financial requirements.

CHALLENGES AND ISSUES IN BUILDING ROBUST FPOs

In last 8-10 years, 5000 FPOs have been formed through initiatives of SFAC (Nodal Agency), NABARD, Government etc. without much success. Hence, to ensure success of new initiative, the Government needs to acknowledge present weaknesses, analyse their reasons and then take outcome-oriented actions.

Promote Collaborative farming: The FPOs need to be formed on basis of adjoining land holdings and common produce to ensure higher economies of scale and undertake value addition.



Finances: The reluctance of Banks to give loans has to be countered through enhanced credit support from Government agencies. Further, Just like cooperatives, the FPOs also must be given income tax exemption.

Handholding: Need to provide regular training and business level handholding.

Professional Management: It can be improved by enabling the Private sector to invest in FPOs. This will need amendment of Companies Act which currently allows only farmers to be producer members.

Market Linkages: Direct procurement by Government; freight subsidy to wholesale buyers; connecting FPOs to online platforms etc.

Village Producer Organisations (VPOs): The VPOs can be developed as a joint venture of FPOs such that an entire village region is developed for a predetermined set of agricultural produce with post-production activities. For example, a region having strength in producing fibre crops can be developed as a VPO to include small handloom weavers.

WAY FORWARD

The promotion of FPCs should not to be seen as a one-time exercise. Though there is sufficient focus on providing financial assistance to FPCs, there is limited hand-holding subsequent to their formation. In this regard, the Government must provide for sustained and continuous support until the time the FPCs become financially viable and independent.

CRITICAL ANALYSIS OF AGRICULTURAL SCHEMES

►PM-KISAN

PM-KISAN provides for an assured income support to the farmers. Under this programme, all landholding farmer families, having cultivable land up to 2 hectares, will be provided direct income support at the rate of Rs. 6,000 per year. This income support is transferred directly into the bank accounts of beneficiary farmers, in three equal instalments of Rs. 2,000 each.

PROBLEMS WITH PM-KISAN

Does not address structural problems such as fragmentation of land holdings, higher dependence on monsoonal rainfall, poor marketing infrastructure (APMCs) etc. and hence PM-KISAN is populist rather than reformist.

Exclusionary: Excludes the landless agricultural workers, tenants and sharecroppers

Lower benefits: Benefit of Rs 6,000 per year is too low; Odisha's Income support scheme provides for interest free crop loan accompanied by Life Insurance support.

Promote Fragmentation of Landholdings: Farming households holding larger land parcels will try to split holdings to try to qualify for the benefits under the scheme.

Absence of land records may lead to exclusion of poor and vulnerable categories of farmers.

►AGRICULTURE INSURANCE: PMFBY

DETAILS ABOUT PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY)

What it does? It provides insurance coverage to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases.

Coverage of Risks- Prevented Sowing/Planting, Yield losses due to non-preventable risks, such as Drought, Dry spell, Flood, Inundation, widespread Pests and Disease attack, post-harvest losses, localised calamities etc.

Note: States may consider providing add-on coverage for crop loss due to attack by wild animals.

Risks not covered: Losses arising out of war and nuclear risks, malicious damage and other preventable risks shall be excluded

Premium: The Premium to be paid by Farmers: Kharif Crops: 2%, Rabi Crops: 1.5%, Commercial and Horticultural Crops: 5%. ***The balance premium is paid equally by Centre and States.***

Coverage*:* Loanee farmers, non-loanee farmers, sharecroppers and tenant farmers (those who farm on rented land).

IMPLEMENTATION CHALLENGES IN PMFBY

Negligible coverage of sharecropper and tenant farmers due to lack of legal recognition of Land leasing.

Mixed cropping and crop diversification discouraged: A limited number of crops are notified by states under PMFBY. Only these crops can avail of insurance.

Poor awareness about PMFBY: Only 30% of the farmers are aware about PMFBY and its benefits.

Inadequate and delayed claim payment to farmers: Only 5-10% of the claims made for crop losses have been paid on time; Many insurance companies cited delay in receiving the state and Central government subsidies as the main reason for delay in reimbursing claims

Very high actuarial premium rates: Insurance companies have charged much higher actuarial premium rates in some states and regions.

Loopholes in assessment of crop loss: PMFBY encourages the use of satellite, remote sensing technology and drones to improve the speed and reliability of the Cost Cutting Experiments (CCEs); most of the states have been unable to carry out the crop cutting experiments in a reliable and fool proof manner.

RECENT CHANGES INTRODUCED IN MARCH 2020

Limit on the Centre's Premium: The Centre would contribute its share of the premium amount, provided the premium is up to 30% for unirrigated areas/crops and 25% for irrigated areas/crops. If the premium is above the threshold, then the centre would not provide the additional premium amount. So, in that case, the additional premium amount would be borne by the respective state government.

Voluntary enrolment of farmers: Earlier, the scheme was mandatory for the loanee farmers and optional for non-loanee farmers. The recent changes have made the enrolment under the scheme voluntary even for the loanee farmers.

Higher share of centre's contribution in North-Eastern States to 90:10 (earlier 50:50)

Timely payment of Insurance premium by States: States would not to be allowed to implement the Scheme in subsequent Seasons in case of considerable delay in payment of premium in previous season.

IMPLICATIONS OF THE NEW CHANGES

Higher Subsidy burden on the States due to limit on capping on premium contribution by Centre

Increase in the insurance premium: The move to done away with the compulsory enrolment of loanee farmers would lead to decrease in the area as well as the number of farmers covered under the scheme. This is expected to lead to increase in the insurance premium under the scheme.

BEED MODEL OF PMFBY

Background: Beed district in Maharashtra is highly prone to droughts wherein the farmers repeatedly face huge losses. Hence, providing agricultural insurance in this District is considered as highly risky for any insurance company. The claims which they are required to pay to the farmers can be higher than the premium which they have collected. For example, if an insurance company has collected gross premium of say, Rs 100 in entire district. But it may be forced to pay Rs 140 in the form of claims due to failure of monsoon. As can be seen from the table below, the claims paid by the insurance company has been higher than the premium it has collected.

PMFBY IN MAHARASHTRA

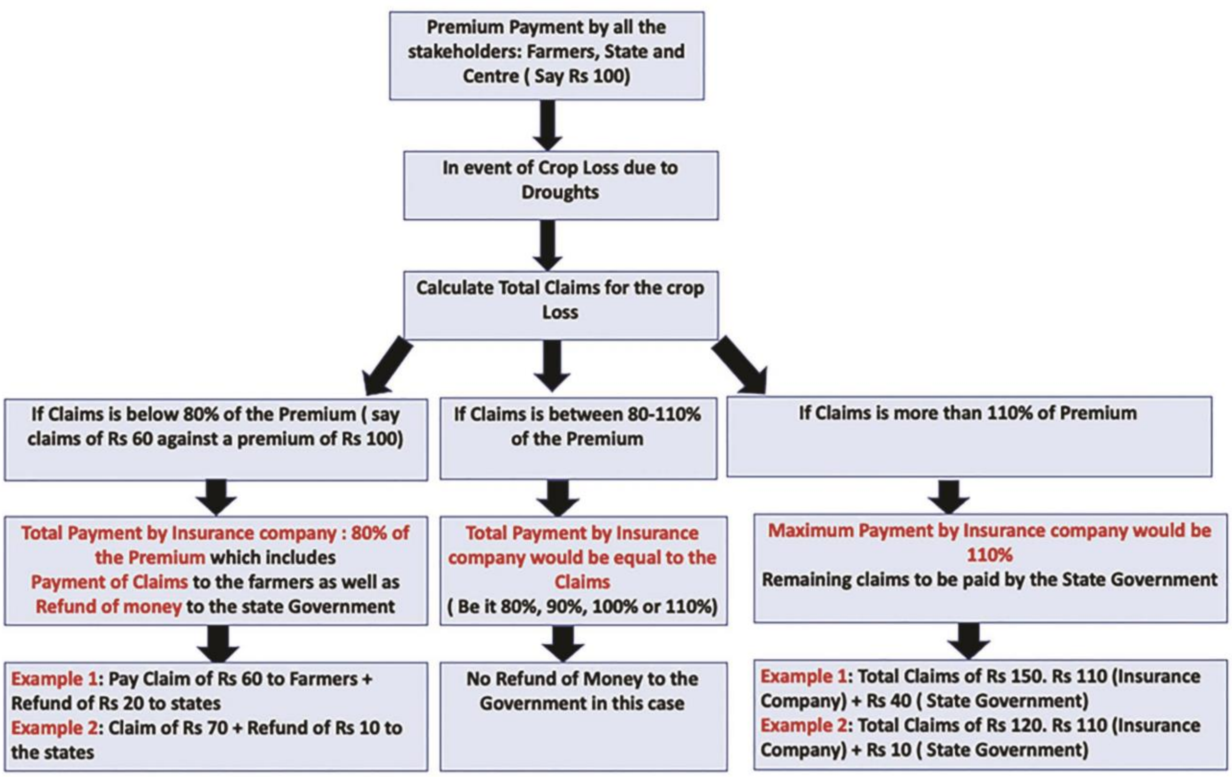
Year	Premium collected	Claims paid
2016-17	₹3,995.02 cr	₹1,924.72 cr
2017-18	₹3,544.33 cr	₹2,707.81 cr
2018-19	₹4,914.16 cr	₹4,655.46 cr
2019-20	₹4,925.57 cr	₹5,511.68 cr
2020-21	₹5,801.73 cr	₹823.19 cr*

*Rabi claims for 2020-21 yet to be finalised

This in turn disincentives the private insurance companies from providing insurance under PMFBY. Hence, the Maharashtra government roped in public sector Agriculture Insurance Corporation of India Limited (AIC) to provide crop insurance in Beed district for the next three years under a unique scheme.

HOW THIS MODEL WORKS?

As per the guidelines, the insurance company will assume liability only up to 110 per cent of the premium collected and the rest will be paid by the State. Similarly, if claims are below 80% of the gross premium, the company would have to share a part of its profits with the State government.



BENEFITS OF THIS MODEL

- Risk sharing between Insurance company and State Government→ Incentivise Insurance companies to come forward to provide insurance
- Sharing of profits with the state Government → Enable the State Government to build corpus which can later be used in subsequent years to pay compensation to farmers
- Capable of being replicated in other states as well→ Ensure success of PMFBY

Note: There is no direct benefit to the farmers under this model as the insurance premium that is required to be paid by them is same.

►PM-KUSUM SCHEME

KUSUM Scheme seeks to incentivise the farmers to set up solar powered plants in their fields so as to enable them to meet their energy needs and supplement their farm incomes. The idea is enable "Annadata" to become "Urjadata".

3 COMPONENTS

1. **Setting up of 10,000 MW of Grid-Connected Solar and Other Renewable energy plants** on Barren/Uncultivable land) → Sell Power to DISCOMs and earn Income.
2. **Off-Grid Areas**: Replacement of diesel agriculture pump sets with 20 lakh Solar Agriculture Pumps→ Reduce the dependence of farmers on diesel and meet their irrigation needs.
3. **Grid-connected Areas:** Replacement of diesel agriculture pump sets with 15 lakh Solar Agriculture Pumps→ Use the generated solar power to meet the irrigation needs and the excess solar power will be sold to DISCOMs.

BENEFITS

Environmental Benefit: Saving of about 27 million tonnes of CO_2 emission per annum.

Economic Benefit: Reduce financial burden on DISCOMs; Promote Renewable Energy; Reduce import of Crude Oil and improve Trade Deficit.

Social Benefit: Supplement Farm Income; Generate Self-Employment; Empowerment of Farmers.

HOW TO IMPROVE THE DESIGN OF THE PROGRAMME?

Reducing Inter-state Disparity: Chhattisgarh and Rajasthan together account for half of two lakh solar pumps currently deployed in the country; Target linked financial assistance to reduce the disparities.

Reducing Intra-state Disparity: Share of central financial assistance should be appropriated for small and marginal farmers/Women farmers.

Give up One Size Fits-all approach: Small and marginal farmers should be given a higher capital subsidy and long-term loans with interest subsidies.

Focus on Efficiency of Pumps: Solarizing grid connected pumps must include replacement of the pump with more energy efficient newer age pumps.

Focus on Post-harvest losses: Use solar power for post-harvesting processes to promote local value addition and enhanced income levels.

►DRYLAND FARMING/ RAINFED AGRICULTURE- CONSTRAINTS AND STRATEGIES

The Rain-fed agriculture which accounts for 55% of net sown area contributes 40% of total food grain production, supports 2/3rd of livestock, 40% of human population and influences the livelihoods of 80% of small and marginal farmers.

Rainfed agriculture is complex, diverse and risk prone. It is characterised by various problems such as **low cropping intensity, high cost of cultivation, poor adoption of modern technology, uncertainty in output, low productivity, increasing number of suicides among farmers, lack of institutional credit, inadequate public investment and high incidence of rural poverty**

CHALLENGES/CONCERNS IN RAIN-FED AGRICULTURE:

Large Yield Gaps: The average yield in rain-fed areas is 3 times lower in comparison to irrigated areas. The farmers in rainfed areas receive 40% less income from agriculture in comparison to those in irrigated areas.

Water risks: Dry spells of 2 to 4 weeks during critical crop growing stages cause partial or complete crop failure.

Soil health risks: Shallow depth, low soil organic carbon, multiple nutrient deficiencies etc

Low and skewed farm mechanization due to small and marginal holdings;

Market risks: Low marketable surplus of small and marginal farmers; lack of quality output; inadequate storage and warehousing facilities, transport facilities and market intelligence, distress sales due to debt obligation etc.

Lack of processing and value addition facilities: Heavy post-harvest losses at around 25-30 per cent for fruits and vegetables are common

Policy bias against rain-fed farming: lower public investment in rainfed agriculture and poor Government procurement of Pulses and oilseeds.

SPECIFIC STRATEGIES FOR SUSTAINABLE AGRICULTURE IN RAINFED AREAS

More crop and income per drop of water: Adoption of drip & sprinkler irrigation; Rainwater harvesting; precision farming through Fertigation; Soil moisture conservation techniques such as Mulching, zero tillage, contour ploughing etc.

Adoption of Integrating Farming Systems (IFSs) model to integrate crops with activities like horticulture, livestock, fishery, apiculture etc. to reduce risk and enhance incomes.

Commodity crop specific strategies: Rainfed areas account for more than 85% of Millets and Pulses production and hence need to focus on crop-specific strategies such as improved varieties, R&D to develop climate resilient crop varieties, reducing yield gaps, guaranteed procurement through PM-AASHA etc.

Soil fertility management: Effective implementation of Soil Health card; Balanced utilization of Fertilizers etc.

Alternate land use system: Integration of Agro-forestry into Rainfed areas to provide economic, social and environmental benefits- Provide fuel, fodder, timber; Reduce risk, improve soil fertility etc.

Animal husbandry: Mobilizing small and marginal farmers into Cooperatives on lines of AMUL Model; Market Linkages through contract farming etc.

Expanding the reach of the mechanisation through custom hiring centers (CHCs); DBT for hiring high cost farm machineries.

Rainfed areas are highly diverse and hence there is a need for decentralised, location-specific approaches to make it inclusive, climate-resilient & sustainable.

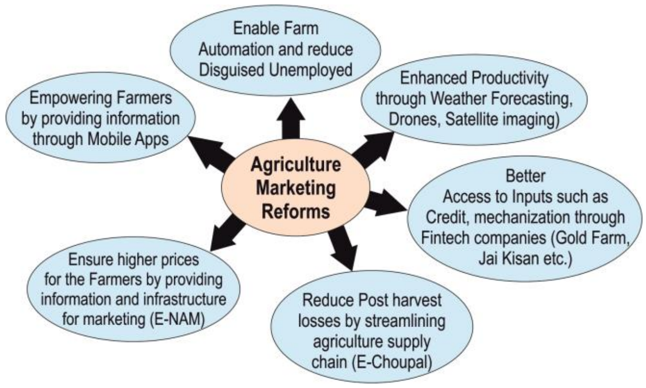
Disaster Preparedness: Need to build capacities of local governments and States to deal with frequent droughts in rainfed areas.

Rainfed areas are highly diverse and hence there is a need for decentralised, location-specific approaches to make it inclusive, climate-resilient & sustainable.

►ROLE OF E-TECHNOLOGY IN AGRICULTURE

Digital Technologies such as ICT, Artificial Intelligence, Big Data, IoT etc. can play a transformative role in modernising agriculture, make it more Industrialised and usher in constructive disruption.

The Government has adopted number of digital initiatives such as **E-NAM, AGMARKNET, ATMA, Kisan Call Centres, Kisan Suvidha app** etc. These initiatives can reduce the input costs, enhance productivity and increase prices received by farmers.



However, adoption of digital technologies faces multi-faceted challenges:

Fragmented landholdings reduce the scope of technology scale up, leading to poor cost effectiveness.

Poor affordability: High-priced technology is unaffordable for small and marginal farmers.

Long gestation period: Adoption and penetration of technology is slow process.

Lack of enabling policy: Adoption of technologies through subsidy is yet to gain momentum.

Poor skill sets among the farmers make adoption of technologies difficult.

Other reasons include **poor extension, lack of access to credit, poor internet penetration** etc.

The Dalwai panel has highlighted Digital technologies as the key enabler for doubling Income levels of the farmers. Going forward, these constraints and challenges should be addressed at the earliest so that Agriculture sector reaps the benefits of ICT.

►ROLE OF AGRITECH

Agritech is the use of technology in agriculture, horticulture, and aquaculture with the aim of improving yield, efficiency, and profitability. Agritech can be products, services or applications derived from agriculture that improve various input/output processes. Examples include Mobile applications, weather forecasts, drones, Use of ICT in agriculture etc.

According to NASSCOM, Agritech can bring in innovation in agriculture leading to its comprehensive transformation:

Access to Inputs: E-commerce Mobile apps provide farmers with access to agricultural inputs at doorsteps. Farmers would also understand best input product to increase yield. Example: BharatRohan

Increased Mechanisation through Uber-like apps such as Goldfarm

Access to Loans through apps such as JaiKisan.

Resource Maximization: IoT based platforms such as Fasal use AI and Big data to optimally utilise water, fertilisers etc.

Enhancing Productivity: NITI Aayog's pilot project on Precision Agriculture using AI for increasing crop productivity.

Agricultural Marketing : Apps such as Ninjacart would streamline supply chain by connecting farmers directly with customers.

Keeping in mind these advantages, states such as Maharashtra and Karnataka have set up separate funds to boost agritech sector. There is a need to upscale these efforts at national level to optimally harness agritech.

►AGRICULTURAL EXTENSION

Agricultural Extension refers to empowering farmers through sharing information, knowledge, technology, skills, farm management practices so as to enable them to realise higher incomes on a sustainable basis. It takes through the Agricultural research Institutes, KVKs, Agricultural Technology Management Agency (ATMA) etc.

Agricultural extension has played a key role in the success of the Green Revolution. However, it has led to Input intensive agriculture. Hence, renewed thrust on knowledge-based extension would modernize agriculture, make it more scientific leading to enhanced income levels.

IMPORTANCE OF EXTENSION

1. Use of outdated and inappropriate technology is the main reason for low productivity of crops and livestock.
2. Empowering farmers with information related to each stage of agricultural cycle- Pre-planting, Seeding, Growing, Harvesting, Post-Harvesting and Marketing.
3. Bridge two gaps- Best scientific practices and best field practices; Best field practices and Average farmer.
4. Extension through Green Revolution has benefitted large farmers. Extension activities have to be more inclusive and hence Focus on empowering the Poor farmers.
5. Enhancing input use efficiency through enhanced knowledge- Soil, water, fertilizer management.
6. Knowledge to make agriculture more climate resilient- ZBNF, Conservation agriculture etc.
7. Huge gap exists between the demand for and supply of skills in agriculture, hindering diversification, adoption of precision agriculture and on farm post-harvest value addition.
8. Providing psychological counselling to farmers to manage distresses
9. Entrepreneurial skills for farmers to manage small scale agri-business;

SUGGESTION FOR REJUVENATION OF AGRICULTURAL EXTENSION IN THE COUNTRY

- Co-opting and converging multiplicity of public, private and not for profit extension services
- Agricultural extension activities to cover "off-farm and non-farm" income generating activities which are critical for doubling farmers' income.
- Leveraging ICT to reach out to farmers will streamline information flow, reduce load on manpower and provide for real time information, among other advantages.
- Revisiting Curriculum in Agriculture Universities:
- Public Private Partnership (PPP) mode through KVKs.
- Agri-business oriented extension system
- Capacity building of extension functionaries

►CONSERVATION AGRICULTURE

Conservation agriculture is advocated as an alternative to the conventional production system. Soil disturbance regulation, surface residue management and crop rotation are the fundamentals (core pillars) of CA.

KEY ELEMENTS OF TRANSFORMATION

Conventional agriculture	Conservation agriculture
1. Cultivating land, using science and technology to dominate nature	1. Least interference with natural processes

2. Excessive mechanical tillage and soil erosion	2. No till/drastically reduced tillage (biological tillage)
3. Residue burning or incorporation	3. Surface retention of residues
4. Use of ex-situ FYM/ composts	4. Use of in-situ organics/ composts
5. Green manuring	5. Brown manuring
6. Free wheeling of farm machinery	6. Controlled traffic
7. Crop based management	7. Cropping system based management
8. Single or sole crops	8. Intercropping/relay cropping
9. Uneven field levels	9. Precision laser land levelling

CHALLENGES

- Difficulties in sowing and application of fertilisers and pesticides
- Problems of pest infestation

IMPACT OF CONSERVATION AGRICULTURE

1. **Economic benefits:** Time saving and reduction in labour requirement; Reduction of costs eg fuel, machinery operating costs and maintenance
2. **Agronomic benefits:** Increase in organic matter content of soil, in-situ soil water conservation, improvement of soil structure, and thus rooting zone.
3. **Soil Fertility:** Fertiliser use efficiency, water holding capacity, soil aggregation, rooting environment and nutrient retention.
4. **Environment and social benefits:** Reduced soil erosion, improves water and air quality, increased biodiversity and carbon sequestration.

WAY FORWARD

1. Need to create awareness about Conservation agriculture related strategies among farmers
2. Need to develop farm machinery to facilitate Conservation Agriculture.
3. Integrated weed management involving chemical and non-chemical methods (residue, cover crops, varieties etc.) is essential for success of CA systems in the long run.

►ORGANIC FARMING- STATUS, INITIATIVES, CHALLENGES AND WAY FORWARD

OPPORTUNITIES

- High demand for organic farming food products which fetches higher prices for farmers.
- Healthy Foods without any pesticide and insecticide residue.
- Improvement in Soil Quality due to enhanced microbial activity under organic farming
- Increased Crop Productivity and Income
- Low Incidence of Pests due to adoption of bio-control methods.
- Organic farming requires more labour input than the conventional farming system and thus promote more employment opportunities.
- Under severe drought conditions, organically managed farms have frequently been shown to produce higher yields than conventionally managed farms due to the higher water-holding capacity of organically farmed soils.
- Indirect Benefits: Eco-tourism, protection of the ecosystem, flora, fauna and increased biodiversity

INITIATIVES TAKEN BY GOVERNMENT TO PROMOTE ORGANIC FARMING

Standards for Organic Foods: Any organic food manufactured, sold and marketed is regulated as per the provisions of Food Safety and Standards (Organic Food) Regulations, 2017.

India has adopted two Organic Certification:

- **National Programme for Organic Production (NPOP)** for Exports. Under the Ministry of Commerce and Industry. NPOP certification is facilitated by Agriculture Processed Food and Export Development Authority (APEDA).
- **Participatory Guarantee System (PGS)** for Domestic and Local markets. Under the Ministry of Agriculture**.** Implemented by Ministry of Agriculture with National Centre for Organic Farming (NCOF) acting as its secretariat.

Note: The Jaivik Bharat logo for Organic Food is an identity mark to distinguish organic products from non-organic ones.

Paramparagat Krishi Vikas Yojana (PKVY): The scheme promotes cluster based organic farming with **Participatory Guarantee System**(PGS certification).

Cluster formation, training, certification and marketing are supported under the scheme.

Mission Organic Value Chain Development for North Eastern Region (MOVCDNER): Development of certified organic production in a value chain mode to link growers with consumers. It provides support for the development of entire value chain starting from inputs, seeds, certification and creation of facilities for collection, aggregation, processing, marketing and brand building initiative.

STATUS OF ORGANIC FARMING IN INDIA

India ranks first in number of organic farmers and ninth in terms of area under organic farming. The total area under organic certification process (registered under National Programme for Organic Production) is 3.67 million Hectare (2019-20). Among all the states, **Madhya Pradesh** has covered largest area under organic certification followed by Rajasthan and Maharashtra.

In 2016, Sikkim became the first State in the world to become fully organic and other States including Tripura and Uttarakhand have set similar targets.

ISSUES AND CHALLENGES

Even though India accounts for 30% of global organic producers, it accounts for only around 2.5% of the of global area under organic cultivation. Some of the reasons for poor coverage of organic farming include:

Poor Awareness: Use of bio-fertilizers and bio pesticides requires awareness. Farmers lack knowledge of compost making using the modern techniques and its application.

Shortage of Biomass: The crop residues are mainly used as fodder and fuel. The small and marginal cultivators have difficulties in getting the organic manures compared to the chemical fertilizers.

Inadequate Supporting Infrastructure: Poor Certification of Organic products; absence of market for organic products; higher prices of organic products etc.

Higher Input Costs: Costs of the organic inputs are higher than those of industrially produced chemical fertilizers and pesticides. Neem cake, vermi-compost, cow dung etc. which are applied as organic manure are increasingly becoming costly making them unaffordable to the small cultivators.

Transition period: When a farmer shifts to organic farming from conventional farming, yields have been shown to have significant drop. However, yields tend to increase with the number of years under organic management as farmers gain experience and soil improves.

Lack of quality seeds supporting organic agriculture: Hybrid seeds are designed to respond to fertilizers and chemicals.

Inability to meet the export demand: Indian organic exports face different constraints such as high price expectations in relation to quality, chemical residues, time consuming and complicated paperwork etc.

WAY FORWARD

1. Supply of sufficient nutrient through organic management, Promotion of Green manures, vermi-composting
2. Promotion of strategies such as Integrated Organic Farming Systems, Multiple Cropping and crop rotation, Hedge row/alley cropping
3. Biological pest management and biological weed management strategies need to be promoted.
4. Making it easier for farmers to certify their food products and market them.

►A CRITIQUE OF FARM LOAN WAIVERS

In 2016-17, India faced a ***cumulative loan waiver of Rs 3.1 lakh crore which is around 2.6%*** of GDP. A waiver of this scale could have paid for ***16 times the rural roads budget or increase India's irrigation potential by 55%.*** Given the amount of money spent on loan waivers, certain valid questions can be raised here - Can the Loan Waivers be considered be a panacea to address the present rural distress?

PROBLEMS WITH LOAN WAIVERS

- **Do not address the structural Problems** and hence considered as Band-Aid solution for the current agriculture inefficiency; Do not address a deeper malaise gripping India's agrarian economy.
- **Do not benefit the Small and Marginal Farmers as** only 15% of these farmers have access to institutional credit (formal credit).
- **Credit Culture in the Economy:** Even those farmers who have the capacity to repay back the loans would default on the anticipation of loan waivers.
- **No Reduction in Farmers' suicides:** According to the National Crime Records Bureau (NCRB) Data, there has been no decrease in the farmers' suicides even in those states where the loan waivers have been announced in the past.
- **Increase in NPAs** due to loan waivers
- **Decrease in Capital Investment in Agriculture:** In anticipation of future losses due to loan waivers, the

Banks would channelize lesser amount of credit to agriculture. Rather than solving the present agrarian distress, the loan waivers could actually aggravate the problem in the future.

- **Impact on the Finances:** The loan waivers in 2019 accounted for 2% of India's GDP leading to higher Fiscal deficit and debt burden.

ALTERNATIVES TO LOAN WAIVERS

- **Enhance Public Investment** to address structural problems such as irrigation canals, rainwater harvesting projects, marketing infrastructure, cold chain storage etc. Such investments could have multiplier effect on the farmers income and would enable the government to realize its vision of doubling the farmers' income by 2022.
- **Fool Proof Insurance Mechanism** by plugging loopholes in the Pradhan Mantri Fasal Bima Yojana (PMFBY).
- **Enhancing cash support** under PM-KISAN Scheme.

►SYSTEM OF RICE INTENSIFICATION

India has the world's largest area under Paddy cultivation and this in turn has led to water crisis. Against this background, the System of Rice Intensification (SRI) provides for an effective strategy to reduce water consumption, increase yields, and thus ensure food security.

ABOUT SRI: The System of Rice Intensification (SRI) is a set of practices for increasing the productivity of irrigated rice. It is a low-water and labor-intensive method that makes use of younger seedlings. The SRI method was initially developed in the 1980s in Madagascar and later adopted in number of countries, including India. SRI practices and concepts have also been successfully adapted to upland rice and to other crops such as wheat, finger millet, and sugarcane.

DIFFERENCE BETWEEN SRI AND CONVENTIONAL METHODS

As can be seen below, SRI method has number of advantages over Conventional Rice management methods:

	Conventional Rice Management	SRI Method
Seeds required	50-60 kg/ha	5 kg/ha
Transplanting	Transplant older seedlings	Transplant young seedlings to preserve growth potential
Water Management	Flood Irrigation	Keep only the soil moist but not flooded
Fertilizer Management	Use Chemical fertilizers	Use organic matter as much as possible
Pest and Disease Incidence	Higher	Lower
Availability of Organic Matter	Less	More

BENEFITS OF SRI

- Decrease water consumption by almost 40%
- Increase yields by over 30%
- Potential to double income level of farmers by enhancing input use efficiency and higher productivity
- Can easily be adopted by Small and Marginal farmers who account for 83% of farmers
- Greater tolerance to abiotic (drought, heat waves) and biotic (pest and diseases) stresses
- Promote environment friendly practices such as Organic farming, reduce emission of methane, improvement in soil fertility etc.
- Potential to apply this method for other crops such as Sugarcane, wheat, millet etc.

Although the benefits of SRI have been demonstrated globally, the potential remains untapped. The report "More Rice with Less Water" recommends that India should convert at least 25% of current rice cultivation to SRI. This would not only dramatically reduce the use of water but also improve global food security.

►FEMINISATION OF INDIAN AGRICULTURE

Growing feminization of Indian Agriculture: With growing rural to urban migration by men, there is 'feminization' of agriculture sector, with increasing number of women in multiple roles as cultivators, entrepreneurs, and labourers. According to Oxfam India, women are responsible for about 60-80% of food and 90% of dairy production, respectively. Further, the Agriculture Census (2010-11) shows that out of an estimated 118.7 million cultivators, 30.3% were females.

STEPS TAKEN BY THE GOVERNMENT

- Earmarking at least 30 per cent of the budget allocation for women beneficiaries in all ongoing schemes/programmes and development activities.
- Initiating women centric activities to ensure benefits of various beneficiary-oriented programs/schemes reach them.
- Focusing on women self-help group (SHG) to connect them to micro-credit through capacity building activities and to provide information and ensuring their representation in different decision-making bodies.
- The Ministry of Agriculture and Farmers Welfare has declared 15th October of every year as Women Farmer's Day.

CHALLENGES FACED BY WOMEN IN AGRICULTURE

Lack of Ownership: Almost 86% of women farmers are devoid of property right in land mainly on account of the patriarchal set up in our society. This lack of ownership of land does not allow women farmers to approach banks for institutional loans as banks usually consider land as collateral.

What must be done? Provision of credit without collateral; Better access to credit, technology, and provision of entrepreneurship abilities; Encourage greater participation of women in the FPOs.

Declining Size of Landholdings: Majority of women farmers fall under the small and marginal category, having less than 2 ha of land. A declining size of land holdings may act as a deterrent due to lower net returns and technology adoption.

What must be done? Collective farming must be encouraged to make women self-reliant. Training and skills should be imparted to women as has been done by some self-help groups and cooperative-based dairy activities (Saras in Rajasthan and Amul in Gujarat). Moreover, government flagship schemes such as the National Food Security Mission, Sub-mission on Seed and Planting Material and the Rashtriya Krishi Vikas Yojana must include women-centric strategies and dedicated expenditure.

Need for Gender Friendly Agricultural Tools: The female cultivators and labourers generally perform labor-intensive tasks (hoeing, grass cutting, weeding, picking, cotton stick collection, looking after livestock. Most farm machinery is difficult for women to operate.

What must be done? Manufacturers should be incentivized to come up with better solutions. Farm machinery banks and custom hiring centers promoted by many State governments can be roped in to provide subsidized rental services to women farmers.

Lack of Access to Resources: Women generally have less access to resources and modern inputs (seeds, fertilizers, pesticides).

What must be done? Krishi Vigyan Kendras in every district can be assigned an additional task to educate and train women farmers about innovative technology along with extension services.

Hence, an 'inclusive transformative agricultural policy' should aim at gender-specific interventions to raise productivity of small farm holdings, integrate women as active agents in rural transformation.

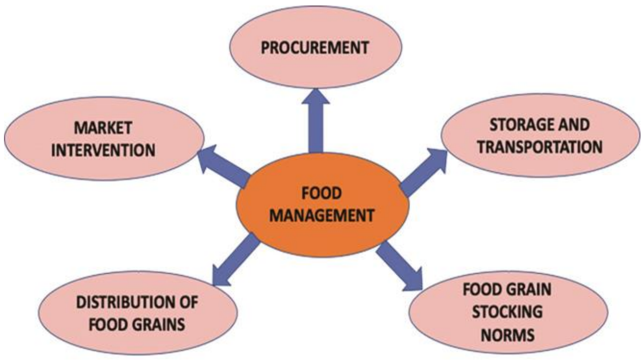
SECTION-2

PUBLIC DISTRIBUTION SYSTEM-FUNCTIONING, LIMITATIONS AND WAY FORWARD

Previous Year Questions

SUB- THEME	YEAR	QUESTION
Food Security	2013	Food security bill is expected to eliminate hunger and malnutrition in India. Critically discuss various apprehensions in its effective implementation along with the concerns it has generated in WTO
	2017	Explain various types of revolutions, took place in Agriculture after Independence in India. How these revolutions have helped in poverty alleviation and food security in India?
	2019	What are the reformative steps taken by the government to make food grain distribution system more effective?

The nodal agency which undertakes procurement and storage of food grain is the Food Corporation of India (FCI). The distribution of food grains is primarily under the National Food Security Act, 2013 (NFSA) and other welfare schemes of the Government and is governed by the scale of allocation and its offtake by the beneficiaries.



VARIOUS COMPONENTS OF FOOD MANAGEMENT

Procurement: The cost incurred by FCI for the procurement of food grains is referred to as Economic Cost of Food grains. It comprises of 3 components - Pooled cost of grains (weighted MSP of stock of food grains), Procurement incidentals (Labour charges, Transport charges, storage cost etc.) and cost of distribution. The States have also been encouraged to undertake the procurement of food grains on their own through the Decentralised procurement scheme. It has been introduced to reduce the transportation and storage costs of FCI.

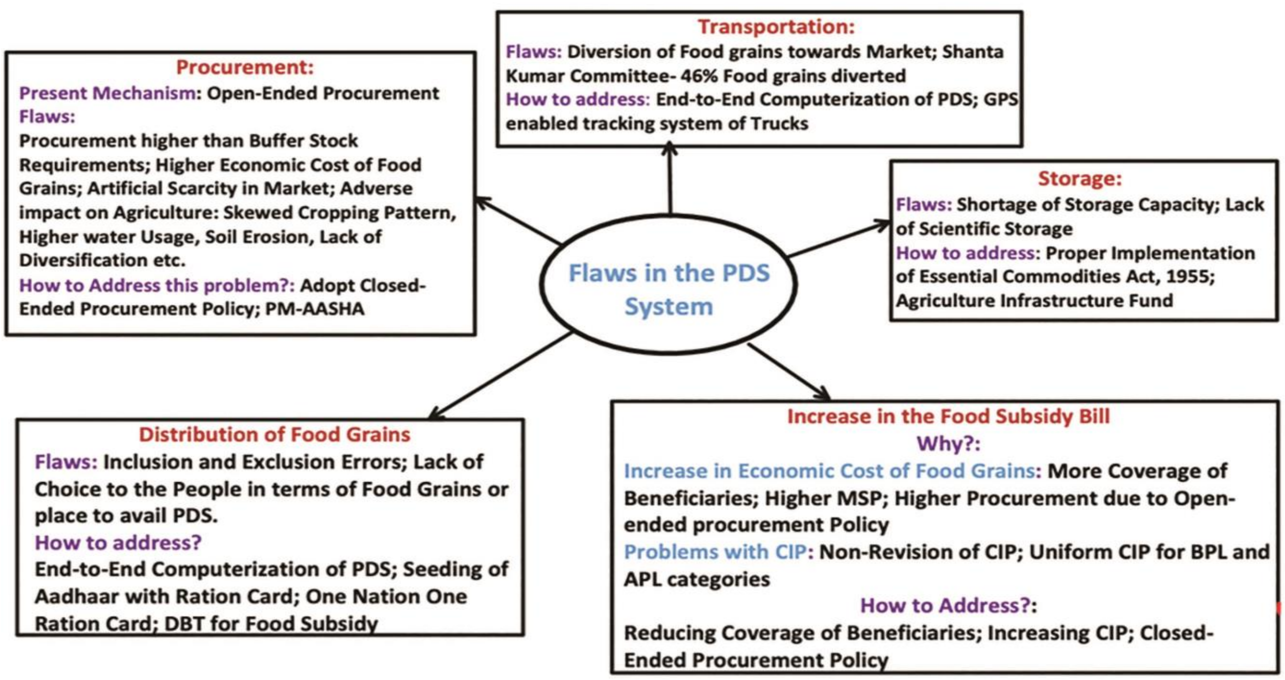
FOOD GRAIN STOCKING NORMS: It has 2 components:

- **Operational Stocks**: For meeting monthly distributional requirement under TPDS and other welfare schemes.
- **Strategic Reserves**: To meet emergency situations.
- Note: The norms are defined for a quarter of financial year i.e., how much buffer has to be maintained for each quarter of financial year.

DISTRIBUTION OF FOOD GRAINS in accordance with National Food Security Act 2013

Note: The Central Issue Price is the price at which centre allocates food grains to the states. It can be considered as the price at which food grains are sold through the network of fair price shops. For instance, it is Rs 1/2/3 per kg for nutri-cereals/wheat/rice respectively. Under the NFSA, the CIP is Rs 200/quintal in case of wheat and Rs 300/quintal in case of rice.

►VARIOUS ISSUES IN PUBLIC DISTRIBUTION SYSTEM (PDS)



RECOMMENDATIONS OF SHANTA KUMAR COMMITTEE ON PDS REFORMS

- **Need for End to End Computerisation**: Given that leakages in PDS range from 40 to 50 percent, Government should defer implementation of NFSA in states that have not done end to end computerization; have not put the list of beneficiaries online for anyone to verify, and have not set up vigilance committees to check pilferage from PDS.

- **Reducing the Coverage:** Reduce the current coverage of 67% of the population under NFSA to 40% (comfortably cover BPL families and some even above that)
- **Increasing the Food grains:** The amount of food grains should be increased to 7kg/person from the present 5kg grain per person.
- **Pricing:** Antyodaya households can be given grains at Rs 3/2/1/kg for the time being, but pricing for priority households must be linked to MSP, say 50 percent of MSP
- **Timely Allocation:** Targeted beneficiaries should be given 6 months ration immediately after the procurement season ends. This will save the consumers from various hassles of monthly arrivals at FPS and also save on the storage costs of agencies.
- **Cash Transfers:** Gradual introduction of cash transfers in PDS, starting with large cities with more than 1 million population; extending it to grain surplus states, and then giving option to deficit states to opt for cash or physical grain distribution. This would lead to saving of Rs 30,000 crores.
- **Storage, movement and Transport of Food Grains:** FCI should outsource its stocking operations to various agencies such as Central Warehousing Corporation, State Warehousing Corporation to bring down costs of storage. Covered and plinth (CAP) storage should be gradually phased out. The Movement of grains needs to be gradually containerized to reduce transit losses.
- **Buffer Stocks:** During the last five years, on an average, buffer stocks with FCI have been more than double the buffer stocking norms costing the nation thousands of crores of rupees loss without any worthwhile purpose being served. The underlying reasons for this situation are many, starting with export bans to open ended procurement with distortions. There has to be a comprehensive liquidation policy which gives sufficient amount of flexibility to FCI to either export or sell the surplus stocks in the market.

►FOOD SUBSIDY BILL: CONSTRAINTS AND STRATEGIES

What constitutes Food subsidy? Food subsidy comprises of (i) subsidy provided to FCI for procurement and distribution of wheat and rice under NFSA and other welfare schemes and for maintaining the strategic reserve of food grains and (ii) subsidy provided to States for undertaking decentralized procurement. The acquisition and distribution costs of food grains for the central pool together constitute the economic cost.

The Food subsidy bill is calculated as the difference between Economic cost of Food grains and Central Issue price (CIP).

Increase in Food Subsidy Bill: The food subsidy bill has increased from 1.2 lakh crores in 2014-15 to 1.7 lakh crores in 2018-19. In order to pay the food subsidy bill, the Government has been borrowing from National Small savings Fund (NSSF) through the issuance of special G-Secs.

REASONS FOR INCREASE IN FOOD SUBSIDY BILL:

INCREASE IN ECONOMIC COST OF FOOD GRAINS

- Higher coverage of beneficiaries under NFSA as compared to erstwhile TPDS
- Increase in MSP (Increase of one unit in real MSP leads to 0.48 unit increase in real economic cost procurement)
- Higher procurement of food grains as against the stocking norms (due to Open Ended procurement Policy)
- Increase in storage cost

PROBLEMS WITH CENTRAL ISSUE PRICE (CIP)

- The CIP for NFSA beneficiaries has not been revised from Rs 200/quintal in case of wheat and Rs 300/quintal in case of rice. These rates were fixed under the Act initially for a period of three years from the date of commencement of the Act and thereafter were to be fixed by the Central Government from time to time, while not exceeding the minimum support price. However, it has not been revised since 2013. This has resulted in widening of the gap between the economic cost and CIP
- Uniform CIP for BPL and APL households

RECOMMENDATIONS TO IMPROVE PDS

- **NITI Aayog:** Reduce the percentage of beneficiaries under NFSA in the rural (from 75% to 60%) and urban areas (from 50% to 40%). Accordingly, the number of beneficiaries under the NFSA will drop from 81 crores to 71 crores. This will lead to annual reduction in the Food subsidy bill by Rs 48,000 crores.
- **Shanta Kumar Committee:**
  - **Need for End-to-End Computerization**: Given that leakages in PDS range from 40 to 50 percent, Government should defer implementation of NFSA

in states that have not done end to end computerization.

- **Reducing the Coverage**: Reduce the current coverage of 67% of the population under NFSA to 40% (comfortably cover BPL families and some even above that)
- **Increasing the Food grains:** The amount of food grains should be increased to 7kg/person from the present 5kg grain per person.
- **Pricing:** Antyodaya households can be given grains at Rs 3/2/1/kg for the time being, but pricing for priority households must be linked to MSP, say 50 percent of MSP
- **Economic Survey 2019-20:** The Central Issue price (CIP) should be revised upwards; Coverage of the beneficiaries under NFSA should be reduced.

►FLAWS IN THE OPEN-ENDED PROCUREMENT POLICY

Presently, Government is following **open-ended procurement policy** to offer **fair and remunerative prices** to farmers and prevent them from distress sale. However, apart from making **food grain management unsustainable**, this policy has neither benefitted farmers nor agriculture.

Presently, there is **no limit on procurement of food grains** such as Rice and Wheat leading to higher procurement. For instance, **Food grain stock** of Rice and Wheat (65 MT) is almost **110%** more than **buffer stock requirements** (30 MT).

IMPLICATIONS

1. **Higher economic cost** for FCI (Rs 50,000 crores) leading to higher debt burden.
2. **Artificial scarcity of food grains** in open market leading to increase in prices.
3. Higher emphasis on procurement of **water-intensive crops such as Rice and Wheat** is adversely affecting agriculture- **skewed cropping pattern, higher water usage, soil erosion, lack of diversification** etc.

Hence, as recommended by CACP, **open-ended procurement has to be replaced by closed-ended procurement** wherein FCI should impose limits on procurement. Adoption of such a policy should also be accompanied by DBT to compensate the farmers if they sell food grains in market below MSP.

SECTION-3

LAND REFORMS IN INDIA

Previous Year Questions

SUB- THEME	YEAR	QUESTION
Land Reforms	2013	Establish the relationship between land reform, agriculture productivity and elimination of poverty in Indian Economy. Discussion the difficulty in designing and implementation of the agriculture friendly land reforms in India.
	2016	Discuss the role of land reforms in agricultural development. Identify the factors that were responsible for the success of land reforms in India.

►NEED FOR SECOND GENERATION LAND REFORMS IN INDIA

Land is emerging as a key challenge in ensuring both inclusiveness and sustainability of growth. On one hand, landless, small and marginal farmers face constraints while there is a growing need for land to promote Industrialisation and Urbanisation.

NEED FOR 2G LAND REFORMS

1. Restrictive agricultural tenancy laws
2. Small and highly fragmented land holdings
3. Outdated land records leading to litigations
4. Cumbersome land acquisition laws
5. High cost of land, making housing unaffordable.

STEPS TO ENCOMPASS BOTH ASPECTS

1. **Land Reforms for equity**

- Implement Model Land Leasing Act, 2016
- Setting up of Land Banks at village level
- Land transfers by Government to poor and marginal sections
- Low interest loans for purchasing land
- Promotion of FPOs for land consolidation

2. **Land Administration**

- Digitisation of land records in a user-friendly manner using technology such as Blockchain, Big Data etc
- Shifting from presumptive to conclusive land titling
- Divesting district collectors of Land Revenue Administration functions

3. **Using land as resource to finance urban development:** Tools such as land value capture,

incentive zoning, town planning schemes, and land-based taxes like land value tax, vacant land tax, land value increment tax etc. can be used to finance rapid and efficient urbanisation.

4. **Land Reforms for Economic Growth**

- Land Banks: For geographical planning and ease of environmental clearances,
- Flexibility in land conversion rules to permit
- Flexibility in Floor Space Index to allow for taller structures to permit more efficient use of space.
- Land lying idle with sick/loss making PSUs may be used to resolve land availability for affordable housing, provision of land for industrial needs etc.

Hence, achievement of faster, sustainable and inclusive growth depends upon the implementation of second-generation land reforms.

►LAND RECORDS MANAGEMENT IN INDIA

POOR LAND RECORD MANAGEMENT IN INDIA

Land titles are presumptive: The current system of land records was inherited from the pre-independence days (zamindari system) and has not changed much since then. These land records provide information on who is in possession of land, and not who the owner is. Registration of land refers to the registration of the transaction, and not the land title. Such registration does not guarantee the title by the government. This implies that even bonafide property transactions may not always guarantee ownership as an earlier transfer of the title could be challenged.

Registration of property is not mandatory for all transactions : Under the Registration Act, 1908, registration of property is not mandatory for all transactions. These include acquisition of land by the government, court decrees, land orders, heirship partitions, and property that is leased for less than one year. Since heirship partitions do not require registration, several property divisions are not recorded, and hence, do not correctly reflect who is in possession of the property. This often leads to litigation related to rightful owner among heirs.

Poor maintenance of land records: Historically, land registration, and the maintenance of records has been done manually. Documents are usually kept with the Revenue Department and are not easily accessible to the public. This makes it difficult and cumbersome to access land related data when trying to engage in a property sale. An individual has to go back several years of documents, including manual records, to find any ownership claims on a piece of property.

Multiple entities deal with land registration and records: In the presence of multiple agencies responsible for registration and maintenance of records, it is difficult to ensure that survey maps, textual data, and registration records match with each other and are updated. In addition, citizens have to approach several agencies to get complete information on land records.

REFORMS UNDERTAKEN TO IMPROVE THE SYSTEM OF LAND RECORDS

Digital India Land Records Modernization Programme: Seeks to achieve complete computerization of the property registration process and digitization of all land records.

Proposal of Conclusive Titling: In a conclusive titling system, the government provides guaranteed titles, and compensation in case of any ownership disputes. Achieving this will require shifting to a system of registered property titles (as opposed to sale deeds) as the primary evidence of ownership, and having clear and updated land records. However, adopting a conclusive system of titling will require undertaking several measures. All existing land records will have to be updated to ensure that they are free of any encumbrances. Information on land records, which is currently spread across multiple departments, will have to be consolidated. Further, several changes in existing laws that govern registration and transfer of land, and institutional changes in maintenance of land records will also have to be.

►LAND DEVELOPMENT BANKS IN INDIA

A land development bank is a quasi-commercial type of bank that provides services such as accepting deposits, making business loans, and offering basic investment products. The main objective of the LDB is to promote the development of land, agriculture and increase the agricultural production. The LDB provides long-term finance to members directly through its branches.

STRUCTURE OF THE LAND DEVELOPMENT BANKS

Primary Land Development Banks (PLDB): These banks were originally organized to cover one or a few taluks in the district. At present they are eligible to cover one development block. All landowners are eligible to become members and borrow funds by mortgaging their land.

Central Land Development Bank (CLDB): These members of the CLDBs are the PLDBs and a few individual promoters. It grants long-term loans to agriculturists through the PLDBs and branches of CLDBs. It raises funds through floating debentures, which are guaranteed by the State Government.

FUNCTIONS OF LAND DEVELOPMENT BANKS

- finance farm mechanization, horticulture and plantation and land development and improvement.
- financing other non-land-based activities like dairy, poultry, sheep and goat, fishery, bio-gas and bullock carts since last few years.
- Financing priority areas like water-shed development in rainfed areas and wastelands development including afforestation.

ISSUES IN FUNCTIONING OF LAND DEVELOPMENT BANKS

- Loans given by them are predominantly for discharging of prior debts and not for purpose connected with land improvements.
- They are not able to raise sufficient funds although their debentures are guaranteed by the State Governments.
- There is no co-ordination between the activities of State Co-operative Bank and Land Development Bank.
- On account of red-tapism, there are the usual delays up to more than a year in granting loans.
- They give loans only up to 50 per cent of the value of the land mortgaged. Thus, a very high margin is kept.
- They adopt complicated procedures which ultimately force the illiterate farmers to resort to moneylenders to meet their financial requirements.

RECOMMENDATIONS

Public Land Bank (PLB) at the panchayat level should be set up. This would regulate and rationalize land demand and supply. The PLB would take 'deposits' of land from landowners wanting to lease out their land. The PLB would lease out the land under its command to specially designated categories of disadvantaged farmers, such as marginal farmers, women, dalits, and tribals, whether leasing as individuals or in groups.

SECTION-4

INCLUSIVE GROWTH AND DEVELOPMENT

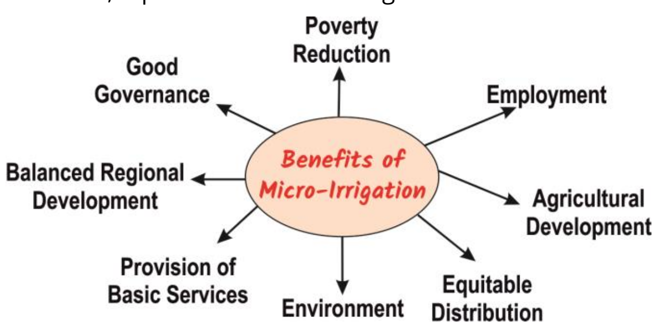
Previous Year Questions

SUB- THEME	YEAR	QUESTION
Inclusive Growth	2013	With a consideration towards the strategy of inclusive growth, the new companies bill, 2013 has indirectly made CSR a mandatory obligation. Discuss the challenges expected in its implementation in right earnest. Also discuss other provisions in the bill and their implications.
	2014	Capitalism has guided the world economy to unprecedented prosperity. However, it often encourages short-sightedness and contributes to wide disparities between the rich and the poor. In this light, would it be correct to believe and adopt capitalism driving inclusive growth in India? Discuss.
		While we found India's demographic dividend, we ignore the dropping rates of employability. What are we missing while doing so? Where will the jobs that India desperately needs come from? Explain.
	2015	The nature of economic growth in India in described as jobless growth. Do you agree with this view? Give arguments in favour of your answer.
	2016	Comment on the challenges for inclusive growth which include careless and useless manpower in the Indian context. Suggest measures to be taken for facing these challenges.
	2017	What are the salient features of 'inclusive growth'? Has India been experiencing such a growth process? Analyze and suggest measures for inclusive growth.
		Account for the failure of manufacturing sector in achieving the goal of labour-intensive exports rather than capital-intensive exports. Suggest measures for more labour-intensive rather than capital-intensive exports.

		Among several factors for India's potential growth, savings rate is the most effective one. Do you agree? What are the other factors available for growth potential?
	2019	Do you agree with the view that steady GDP growth and low inflation have left the Indian economy in good shape? Give reasons in support of your arguments.
		It is argued that the strategy of inclusive growth is intended to meet the objectives of inclusiveness and sustainability together. Comment on this statement.
	2020	Explain intra-generational and inter-generational issues of equity from the perspective of inclusive growth and sustainable development.
		Define potential GDP and explain its determinants. What are the factors that have been inhibiting India from realising its potential GDP?
		Explain the meaning of investment in an economy in terms of capital formation. Discuss the factors to be considered while designing a concession agreement between a public entity and a private entity.
Government Schemes	2015	"Success of 'Make in India' programme depends on the success of 'Skill India' programme and radical labour reforms." Discuss with logical arguments.
		Craze for gold in Indians have led to a surge in import of gold in recent years and put pressure on balance of payments and external value of rupee. In view of this, examine the merits of Gold Monetization Scheme.
	2016	Pradhan Mantri Jan-Dhan Yojana (PMJDY) is necessary for bringing unbanked to the institutional finance fold. Do you agree with this for financial inclusion of the poorer section of the Indian society? Give arguments to justify your opinion.
		What are 'Smart Cities? Examine their relevance for urban development in India. Will it increase rural-urban differences? Give arguments for Smart Villages' in the light of PURA and RURBAN Mission.
Planning and Mobilisation of Resources	2018	How are the principles followed by the NITI Aayog different from those followed by the erstwhile Planning Commission in India?

►INCLUSIVE GROWTH IN INDIA

India has made rapid strides in its economic growth wherein the GDP size has increased from $ 275 bn in 1991 to $ 2.7 trillion in 2019. It is also considered to be the fastest growing major economies across the world. However, such a growth model has failed to promote balanced, equitable and inclusive growth.



REASONS FOR LACK OF BALANCED AND INCLUSIVE GROWTH

Problems with Poverty Eradication Programmes such as poor identification of beneficiaries, presence of ghost beneficiaries, poor allocation of finances, poor implementation, large scale corruption and lack of transparency and accountability. For instance, according to the NSSO report, around 40-60% of the food grains do not reach the beneficiaries due to diversion of food grains and black marketing.

Employment: The higher economic growth in India has not translated into higher employment opportunities leading to jobless growth. According to various estimates, the employment elasticity in India has remained quite low at 0.1.

Agricultural Development: The increase in the input costs, decrease in the agricultural productivity accompanied by decrease in the prices received by the farmers on the agricultural produce has led to fall in the income levels of the farmers. According to the NSSO estimates, the average monthly income of the agricultural household is around Rs 6500 whereas their average monthly expenditure is around Rs 6250.

Equitable Distribution of Income: As per Credit Suisse, 1% of the wealthiest in India have increased their share in wealth from 40% in 201o to 60% in the last five years.

Provision of basic services: India's expenditure of 3% on education is much below the target of 3%. Similarly, expenditure on health has remained quite lower at 1.3% as against the mandated 3%.

Balanced Regional Development: Some of the states such as Maharashtra, TN, Punjab etc have made rapid progress on account of historical, geographical and economic factors. However, the states in the North East and Eastern India continue to have lower growth rates. Similarly, even within the states, there are certain pockets of underdeveloped regions such as Vidharbha (Maharashtra), Saurashtra (Gujarat), Hyd-Kar region (Karnataka) etc.

Environmental Destruction: The extreme weather events such as cyclones, droughts, floods etc would have a much higher impact on the poor and vulnerable sections such as SCs, STs, Women etc.

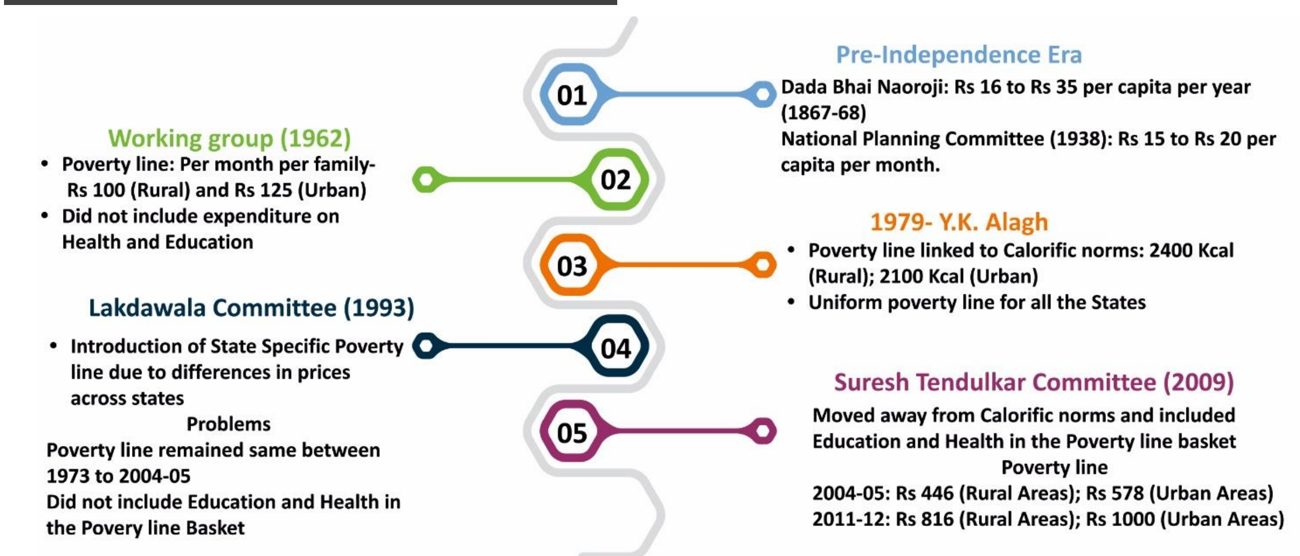
WAY FORWARD

The Government has to realize that "Ease of Living" is much wider and comprehensive as compared to "Ease of Doing Business". Ultimately, Gandhi's philosophy of putting the last man first should be the sole guiding light for the government's policies.

►POVERTY LINE ESTIMATES IN INDIA

Poverty eradiation remains a major challenge in creating a just and equitable society. The first step towards eradication of poverty is to estimate proportion of people living below the Poverty line. However, there is a considerable debate and controversy surrounding Poverty line estimation. On one hand, successive Governments have highlighted the success of their schemes and programmes in reducing the BPL population. While, on the other hand, it has been highlighted that Poverty line in India is too low and hence India may be underestimating the BPL population.

EVOLUTION IN POVERTY LINE ESTIMATION IN INDIA



CONTROVERSY OVER THE LATEST POVERTY LINE ESTIMATES

Presently, the proportion of people living below the Poverty line is estimated based upon the methodology recommended by Suresh Tendulkar Committee.

Poverty Estimation based upon Suresh Tendulkar Committee					
Year	Poverty line (Rs)		Poverty head count ratio		
	Rural	Urban	Rural	Urban	All-India
2004-05	Rs 446	Rs 578	41.8%	25.7%	37.2%

2011-12	Rs 816	Rs 1000	25.7%	13.7%	21.9%

CURRENT DEBATE ABOUT POVERTY LINE ESTIMATION

Controversy surrounding Poverty line estimation	
Problems	**Counter Arguments**
1. **Outdated Poverty Line Basket**: Poverty varies across time. As standard of living has improved, the poverty line basket also needs to be updated. Items which were considered as luxury have now become necessity (Mobile, TV, Bank Account etc.). However, these items are not part of poverty line basket. 2. **Poverty line is too low:** Poverty line of Rs 27 in rural areas and Rs 33 in urban areas fails to capture true scenario of poverty in India. Hence, India may be underestimating BPL population. 3. **Flawed Assumption:** Poverty line estimation is based on flawed assumption that if people can meet their basic food needs, they would also be able to meet non-food requirements as well. That is why non-food requirements such as Mobile, TV etc. is not considered. We need to understand that the priority for the people is to meet their food requirements. After meeting their food requirements, they may not have money left for non-food expenses. 4. **No multi-dimensional view of poverty:** Fails to realize that poverty is on account of multiple deprivations such as education, health, housing, sanitation etc. For example, according to Global Multi-dimensional Poverty Index (MPI 2020), 28% of India's population is poor. This is much higher than our official estimates of 22%.	1. **Official poverty line estimates closer to World Bank's estimates**: The World Bank has set the International Poverty line at $1.90 a day at 2011 international prices. 22.5% of population live below poverty line (World Bank, 2011). This is comparable to official estimates of 22%. 2. **Poverty line estimation is only for statistical purposes:** Opposition parties highlight that decrease in BPL population due to artificially lower poverty lines would lead to exclusion of the people from beneficiary list in government schemes and programmes. But the Government believes that ***estimation of BPL population and identification of beneficiaries*** are two different things. The identification of beneficiaries for government schemes and programmes (such as Ayushman Bharat, PM Awas Yojana, PM Ujjwala Yojana etc.) is not just limited to BPL population. It also includes APL population as well. Identification of beneficiaries takes place based upon the Socio-Economic Caste Census (SECC) and hence has no relation to Poverty line estimation. 3. **Frequent updation of Poverty Line Basket (PLB)** would make it difficult to track our progress in poverty alleviation. It would also make it difficult to analyse the impact of government schemes and programmes in eradicating poverty.

WAY FORWARD

Perceptions of what defines basic human needs vary widely. Hence, views on "What should be the Poverty line?" and "What should constitute Poverty line Basket?" vary and likely to give rise to controversy and debate. So, should we do away with the Poverty line altogether??

No, fixing a poverty line (though controversial and debatable) has its own advantages. It helps us track our progress in poverty reduction as enshrined under SDG 1 (Ending Poverty in all its manifestations). It also helps us to analyse the impact of Government schemes, policies and initiatives. In this regard, Arvind Panagariya Taskforce on Elimination of Poverty has outlined the 4 options with respect to Poverty line.

Option 1: Continue with the Tendulkar poverty line

Option 2: Accept the Rangarajan poverty line or higher rural and urban poverty lines

Option 3: Track progress of the bottom 30 of the population

Option 4: Track progress along specific components of poverty such as nutrition, housing, drinking water, sanitation, electricity and connectivity.

(Option 3 and 4 can be complementary to option 1 or 2 but cannot be a substitute for it).

►GDP GROWTH VS INCOME INEQUALITY: WHAT SHOULD INDIA DO?

In advanced economies, following Global Financial Crisis a conflict came to be seen between economic growth and inequality, with inequality as a feature of capitalism. As Indian economy moves towards a market-based paradigm there is a debate on how to address this conflict. (Eco Survey 2020-21)

Advanced economic have low absolute poverty and low growth rates, however, India has high economic growth rates and high level of absolute poverty. Example: Gini coefficient in US (0.41) is higher than India (0.35) with growth potential of US lower than that of India. Hence, it is prudential for US to target inequality and India to pursue economic growth.

IN INDIAN CONTEXT, DATA SUGGESTS:

- Unlike advanced economies, Indian economic growth and inequality converge in terms of their effects on socio-economic indicators.
- Economic growth has far greater impact on poverty alleviation than inequality.

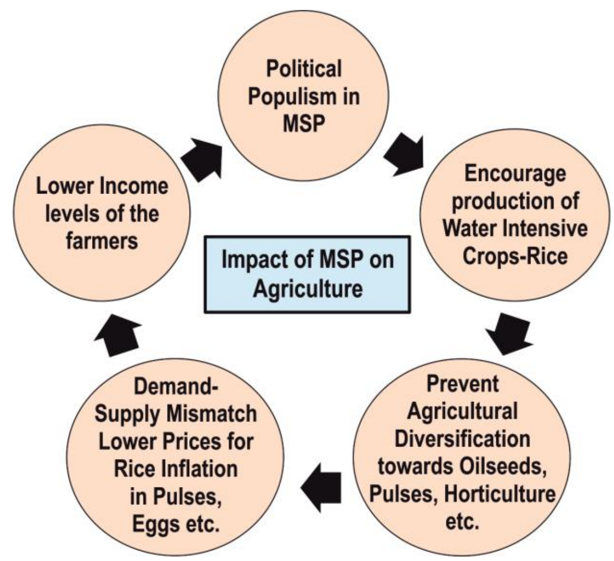
Therefore, given India's stage of development, India must continue to focus on economic growth to lift the poor out of poverty by expanding the overall pie. This does not imply that redistributive objectives are unimportant, but that redistribution is only feasible in a developing economy if the size of economic pie grows.

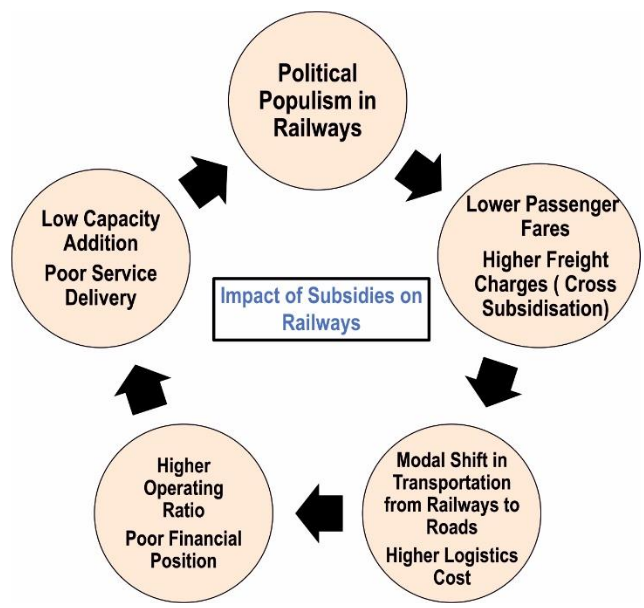
►CRITICAL ANALYSIS OF SUBSIDY REGIME IN INDIA

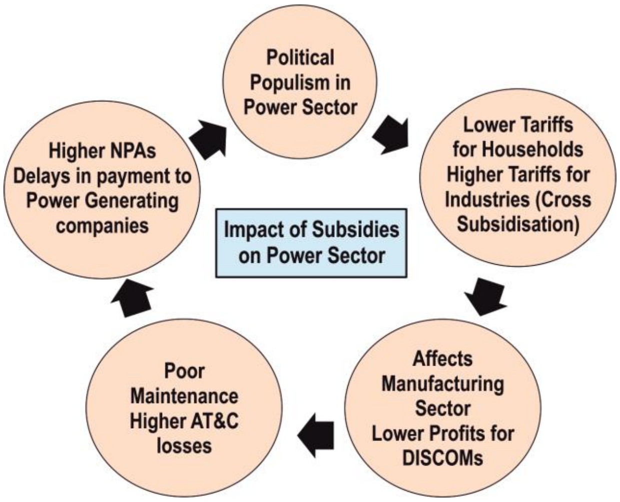
Since 1970s, subsidies have always remained the main plank for poverty eradication in India. The Government provides number of subsidies in the form of Food, Fertiliser, Electricity, Water, MSP, railway Passenger fares etc. In 2020-21, the Government has spent almost Rs 6.5 lakh crores on subsidies in comparison to defence expenditure of Rs 4.8 lakh crores. So, the question is "Are these subsidies the best weapon for fighting poverty in India?".

PROBLEMS WITH SUBSIDY REGIME

1. **<u>Price subsidies are often regressive:</u>** Some of the subsidies such as Electricity, Fertilisers, MSP etc. are universal in nature and are given to all the households irrespective of their socio-economic status. Being universal in nature, such subsidies benefit the richer households more than the poor households and hence considered to be regressive in nature.
2. **Leakages and Corruption:** Inclusion and Exclusion Errors; Duplicate and Ghost Beneficiaries; Presence of Middlemen, Poor administrative efficiency etc. Example: 46% leakage in PDS
3. **<u>Subsidies create distortions and ultimately affect poor people:</u>**







AGRICULTURE

Announcement of higher MSP on Rice and Wheat has encouraged cultivation of water-intensive crops and prevented diversification of Indian Agriculture towards Pulses, Oilseeds, Fruits and Vegetables etc. It has impacted the poor people in the following ways:

- **Low Income for Farmer**s
- **Inflation in Agri-Commodities**: Lower production of Pulses, Oilseeds, Eggs etc. lead to demand-supply mismatch.
- **Nutritional Insecurity**: The demand-supply mismatch has led to nutritional insecurity leading to micronutrient deficiencies, vitamin, iron deficiencies etc.

RAILWAYS: Cross subsidization of Passenger fares by increasing freight charges→ Higher Operating Ratio (98%) → Lower profits→ Poor service delivery to poor people.

SUBSIDY ON ELECTRICITY: Subsidy on Electricity-->Poor Financial position of DISCOMs--> High AT&C losses--> Inability to provide 24X7 Electricity to poor households

4. Adverse Impact on different sectors of Economy

Banking: Farm loan waivers can have an adverse impact on the credit culture in the country as even those farmers who have the capacity to repay back the loans would default on the anticipation that the loans would be waived off by the government. Similarly, poor financial position of DISCOMs and Power generation companies has led to increase in NPAs.

Power Sector: Poor financial position of DISCOMs; Higher AT&C losses; Inability to pay money to power generating companies; Higher NPAs of Banks

Railways: Higher Operating Ratio; Lower profits; Decrease in capacity addition and Modernization; Higher Logistics Cost

Public Finance: Higher expenditure on subsidies reduces the ability of the government to spend money on creation of assets such as Roads, Railways, ports etc. leading to decline in overall productivity of economy

WAY FORWARD

Eliminating or phasing down subsidies is neither feasible nor desirable unless accompanied by other forms of support to cushion the poor and vulnerable. In this regard, the JAM Number Trinity – Jan Dhan Yojana, Aadhaar and Mobile numbers would be able offer this support in a targeted and less distortive way.

►URBAN WAGE EMPLOYMENT PROGRAM- RATIONALE AND BENEFITS

The recent Covid-19 crisis has underscored the need for Urban Wage employment programme on the lines of MGNREGA. Such a wage employment programme in the urban areas can not only restore livelihood opportunities of the urban migrants, but it can also help us ramp up our urban infrastructure.

DESIGN OF THE PROGRAMME

Legal Sanctity: This programme should have a strong legal basis in the form of a National Urban Employment Guarantee Act which provides a statutory right to employment at specified wage rates and number of days.

Coverage: Cater both to urban informal workers and educated youths.

- **Informal workers** should be guaranteed 100 days of wage employment. These workers should be involved in public works such as building and maintenance of roads, parks etc.
- **Educated youths**- Skill development and entrepreneurship. For example, the educated youths can get training through apprenticeship in municipal office, schools, hospitals.

Nature of Work:

- Public works such as construction of buildings, roads, Restoration of urban commons like water bodies, wetlands, parks etc.
- Engagement of apprentices in municipal offices, schools, Hospitals etc.

Implementation:

- Programme should be implemented by Urban Local bodies (ULBs).

- Finalisation of works should be done in a participative manner through regular consultation with the ward sabhas.
- Mandatory social audit and public hearings
- Time bound Grievance redressal mechanism

RATIONALE AND BENEFITS

Absence of Wage-employment Programme in Urban Areas: Swarna Jayanti Shahari Rozgar Yojana (SJSRY) launched in 1997 has been replaced by National Urban Livelihoods Mission (NULM) in 2013. The NULM lays more emphasis on self-employment and entrepreneurship rather than on wage employment.

Boost Demand and Employment Creation: As per the PLFS 2017-2018, open unemployment stands at a historic high of 6.1 per cent, and unemployment among educated youth has reached 20 per cent. Unemployment in urban areas is higher than the unemployment rate in rural areas.

Increased Urbanisation: By 2030, it is estimated that around 42% of India's population would be urbanised from the current 31%. Plugging the deficiency in infrastructure will smoothen the process of urbanisation by promoting ease of living and facilitating economic activity.

Changing Demography in India: The Economic survey 2018-19 has highlighted that the share of working of working-age population would increase from 50% (2011) to 59% (2041), while the share of senior citizens would increase from 8% (2011) to 16% (2041). The changed demography will need the converged development of a host of infrastructure facilities such as housing, water sanitation services, digital and transportation needs.

Climate change and disaster resilience: Building Climate Resilient infrastructure is critical for people's well-being, quality of life, and economic prospects. The recent disasters indicate that up to 66% of total public sector losses in weather and climate related extreme events are related to infrastructure damage.

Expansion of Constitutional Rights: An employment guarantee programme also strengthens the 'Right to Life' enshrined under Article 21 of the Constitution of India.

►UNIVERSAL BASIC INCOME

CONCEPT OF UBI

It is a regular fixed cash transfer payment provided by the government to every citizen or resident regardless of their socio-economic status to ensure that they are at least able to meet their basic needs. The UBI is defined by 3 characteristics:

- **Universality:** Covers the entire population without taking into account the socio-economic status.
- **Un-conditionality:** It should be given without any conditionality.
- **Agency:** UBI should be in the form of cash transfers without dictating the choices i.e. the recipients should have complete freedom to use the UBI in whatever way they deem fit.

THE DEBATE SURROUNDING UBI

FAVOUR	AGAINST
Freedom and Justice • Guarantees Right to life under **Art 21**. • Ensures basic human rights to the people. • Acknowledgment of the unpaid work done by the homemakers. **Poverty Reduction** • Does away with "**One size fits all approach**" of the Government schemes to eradicate poverty. • Empowers the families to take their own decisions based upon their needs (a better tool for poverty eradication) • Does away with problem of Exclusion errors in the BPL List (**"wipe out every tear from every eye")** **Reducing Income Inequality** • Provides security net to withstand any potential job losses in future due to growing automation. • Enables the poor people to improve their skill set leading to higher productivity. • Enhances the bargaining power of the labour class leading to increase in wages and better working environment. • Financing of UBI through	**Social Cost** • Increase in the expenditure on temptation goods such as Alcohol by the male members. • **Gender disparity-** Men are likely to exercise control over spending of the UBI. This may not always be the case with other in-kind transfers such as LPG subsidies. • Goes against the **Principle of Reciprocity** which mandates that the rights should be commensurate with the obligations/duties of the person. **Political Cost** • Problem of Exit-Difficult for the government to introduce UBI by doing away with subsidies. • UBI may emerge as add-on rather than a replacement to the existing poverty eradication schemes leading to inefficiencies. • Competitive populism in fixing UBI leading to higher fiscal deficit.

progressive taxation would help in transfer of income from the richer class to poor

- Positive spill over effects such as increased levels of entrepreneurship among the poor families.

Mental health

- Free from mental burden of meeting basic needs.
- Increased personal satisfaction and emotional well-being leading to higher productivity.
- Gives choice to the people and liberates citizens from paternalistic and clientelistic relationships with the state.

Financial Inclusion

- UBI Transfers will encourage greater usage of bank accounts and hence improvement in financial inclusion.
- Increase in the customer base of the banks and opening of more branches in rural areas.

Administrative Efficiency

- Reduce the administrative burden of implementing large number of overlapping schemes.
- Adoption of JAM trinity (Jan Dhan, Aadhaar and mobile) leading to increase in efficiency.

Does not affect the incentive to work

- UBI covers only the basic needs and the people would work in order to meet higher order needs (can be explained by **Maslow's Theory of Motivation**)
- People work not just to meet their financial needs but also to meet their social and psychological needs

Does not lead to increase in Temptation goods

- Both alcohol and Tobacco are inferior goods and not normal goods i.e. their demand reduces as the income level of the people increases due to the substitution effect **(Law of Demand).**
- The assumption that the UBI would lead to increase in the temptation goods goes against the empirical evidence.

Economic Cost

- Feasibility of UBI- Implementation of UBI would need 12.5% of GDP (based upon Tendulkar Committee's poverty line estimates of Rs 1190 per person per month)
- Exposure to market risks- Unlike food subsidies that are not subject to fluctuating market prices, the cash transfer's purchasing power may severely be curtailed by market fluctuations.
- Difficult to improve tax-GDP ratio to fund UBI.

Implementation

- Lack of financial inclusion among the poor would pose a major challenge.
- Poor financial awareness among the people.

Abdication of responsibility by the State

- The state may abdicate its responsibility of providing basic services such as Education, Health etc upon transferring UBI to the people.

Failure of Pilot UBI programs in some countries

- Finland has decided not to extend the pilot UBI programme since it has led to increase in income inequality and decrease in the labour force.

GUIDING PRINCIPLES FOR SETTING UP UBI

The Economic Survey has highlighted the possible approaches to implement UBI:

De jure universality, de facto quasi universality

1. Automatic Exclusion criteria such as ownership of movable and immovable assets to exclude the non-deserving people from the ambit of UBI.
2. 'Give it up' scheme wherein those who are non-deserving chose to opt out of the programme just as in the case of LPG and are given credit for doing so.
3. Introduce a system where the list of UBI beneficiaries is publicly displayed; this would "name and shame" the rich who choose to avail themselves of a UBI.

Gradualism

1. Rather than providing UBI in addition to current schemes, UBI can be offered as choice to beneficiaries of existing programs.
2. Provision of UBI for the women only. This would reduce the expenditure on UBI by half with greater benefits to the families.
3. Start with implementation of UBI only in the urban areas since higher financial inclusion would ensure its success.

Further, we can also think of introducing Negative Income Tax (NIT) instead of UBI. Under the NIT, all the individuals whose annual income is below the threshold for tax liability would be able to get the monetary support from the government. Hence, unlike the UBI, the NIT is not universal and hence would incur fewer costs.

►REAPING THE DEMOGRAPHIC TRANSITION IN INDIA

India is said to witness a rapid demographic transition in the next 2 decades with demographic dividend expected to peak by 2041. Coupled with the declining share of young and increasing old age population, India will need to reorient its socio-economic policies in accordance with the changing demography as shown below.

Population (Age-Group)	2011	2041
0-19	41%	25%
20-59	51%	59%
Greater than 60	8%	16%

Focus of job creation: While 60% of India is projected to be in the working age (20-59) the labour force participation today is at meagre 53%. Thus we need to have a sustainable long-term vision for job creation which includes a 360 degree approach of generating jobs, producing job creators and empowering the labour force.

Skilling and Reskilling: Being at the cusp of 4th industrial revolution the 21st century jobs require skilling and reskilling. Thus social-economic policies targeting skill development should be designed such that they are in a continuum with education that focuses on enhancement of learning capabilities.

Consolidation of schools: With decline in share of young (0-19) to about 1/4th , policies targeting consolidation of schools need to be promoted without affecting access.

Upgradation of health facilities: With an abysmal hospital beds per 1000 population of 0.7, India needs to upgrade health care facilities particularly in the tertiary sector that is linked with life-style disorders.

Retirement Age: Given the increase in healthy life expectancy beyond 60, India should increase its retirement age atleast up till 65 as has been contemplated by developed countries.

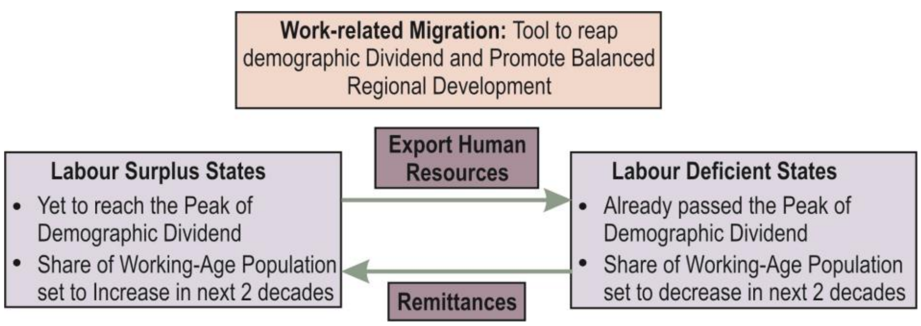
Thus in order to become a $5 trillion economy, India needs to employ an inclusive approach that focuses on each section of the population structure that is witnessing a change.

►NEED FOR INCLUSIVE MIGRATION POLICY IN INDIA

Historically, migration of people for work and education has been a phenomenon that has accompanied the structural transformation of economies. It has paved the way for the release of "surplus labour" from relatively low-productive agricultural activities to sectors enjoying higher productivity. In case of India, as highlighted by Economic Survey 2016-17, the Internal Migration has acted as key enabler for promoting growth and development in India as well. However, the recent economic distress caused due to COVID-19 has underscored the need for comprehensive and holistic policy to cater to the migrant population.

INTERNAL MIGRATION IN INDIA

The number of internal migrants in India was 450 million as per the most recent 2011 census. This is an increase of 45% over the 309 million recorded in 2001. This far exceeds the population growth rate of 18% across 2001-2011. Further, the Economic Survey 2016-17 has highlighted that the annual inter-state labour mobility averaged 5-6 million people between 2001 and 2011. The benefits of this internal migration has enabled India to reap demographic dividend optimally and at the same time promote Balanced regional growth and development.



This acceleration in Internal migration has taken place in the backdrop of discouraging incentives such as domicile provisions for working in different states, lack of portability of benefits, legal and other entitlements upon relocation. To sustain this Internal migration post COVID-19, these policy hurdles have to be overcome. Portability of food security benefits, healthcare, and a basic social security framework for the migrant are quite crucial.

POLICY RECOMMENDATIONS

Immediate Measures

- **Mandatory Registration for all workers under** Interstate Migrant Workers Act
- **Creation of Migration Support Centres (State/ District wise) to** facilitate services like the creation of Ration Card, Banking, Gas Connections etc.
- **Expanding Apprenticeships** in the local industries can help migrants develop more skills.
- Expanding Social Security benefits to migrant workers
- **Skill Development Fund for Migrant Workers**
- **Housing facility through a**ffordable Rental Housing Complexes (ARHC) for Migrant Workers under Pradhan Mantri Awas Yojana (PMAY)

LONG TERM MEASURES

Promotion of Sustainable Migration: There is a need to provide for livelihood opportunities in the residence states to check distress induced migration. This can be done through the following steps:

- Organising traditional rural Industries into clusters to enable them to reap economies of scale.
- Enhancing marketability of the products of these Industries by providing them with necessary support such as design for new products, improved packaging and improvement of marketing Infrastructure.
- Re-skill and Upskill the workers based upon the existing demands
- Encourage Self-Help Groups (SHGs) in the rural areas.

Focus on Development of Tier II and Tier III Cities: Presently, the Internal Migration within India is said to be distorted since most of the migrants migrate to metropolitan cities such as Delhi, Mumbai, Bengaluru etc. On one hand, this puts huge pressure on these Cities to cater to the needs of the migrants. While, on other hand, it leads to underdevelopment of Tier II and Tier III Cities. Hence, there is a need to promote balanced Urbanisation by focussing on development of Tier II and Tier III Cities which can act as countermagnets to metropolitan cities.

►GIG ECONOMY- PROSPECTS AND CHALLENGES

A gig economy is a free market system in which the organisations employ contractual, non-permanent employees for short-term engagements. The Global Gig Economy Index report has ranked India among the top 10 countries.

Gig Economy in India: It is estimated that out of 21 lakh jobs that will be created in the metros in 2019-20, 14 lakh jobs will be created in Gig Economy. Food and e-commerce companies account for the major share of job creation in the Gig Economy.

REASONS FOR THE DEVELOPMENT OF GIG ECONOMY

- Rapid growth of the digital communication wherein the workforce is highly mobile, and work can be done from anywhere without any geographical barriers.
- Adoption of Gig Economy reduces the operating costs of the firms since the companies would not be liable to pay pension and other social security benefits.
- Flexibility to the workers wherein they can switch jobs frequently and choose work which suits
- their area of interest.
- Recent slowdown in the formal employment creation has also boosted the development of Gig Economy.

CONCERNS AND CHALLENGES OF GIG ECONOMY IN INDIA

- It leads to creation of informal sector jobs and thus hinder the optimum utilization of demographic dividend.
- Current Indian labour laws do not explicitly consider gig workers. Acts like maternity benefit, sexual harassment at workplace etc are silent or unclear.
- Absence of social security benefits such as insurance, pension, provident fund etc.
- Lack of Job Security and presence of workers from across weakens the bargaining power.
- Temporary nature of transactions undermines the need to build long-term relationships between buyers and sellers

PROTECTION PROVIDED TO GIG WORKERS UNDER LABOUR CODES

The Labour Codes that seek to introduce Labour Reforms in India have legally acknowledged the presence of Gig Workers in the economy. For example, the Code on Social Security, 2020 provides for the registration of all the Gig workers. It calls upon the Central and State Governments to formulate schemes to ensure social security benefits such as Insurance for the Gig workers. It also empowers the Government to set up Social Security Funds for their benefit. The contribution to these funds may be funded from contributions of Centre, State and aggregator platforms such as Uber, Zomato etc.

CONCERNS/ CHALLENGES

Lack of Labour Rights: Platform workers often have limited control over their work (for instance, in some cases they cannot set prices, they are required to wear uniforms, they cannot choose the order of their tasks, etc.). This in turn makes them prone to the exploitation of the platform-based companies.

Greater control by Employees: It is being said that the Gig/Platform workers enjoy higher level of freedom and flexibility in their work. However, these advantages get over-shadowed by their higher dependence on the platforms. Take for instance, if a person wants to work a cab driver or food delivery agent, he needs to own vehicle. Since, poor people do not have access to loans, they come to be dependent on the platforms for the loans provided by them. This in turn reduces the flexibility associated with the Gig Economy. The Workers would have to work according to the needs and requirements of the Platform companies.

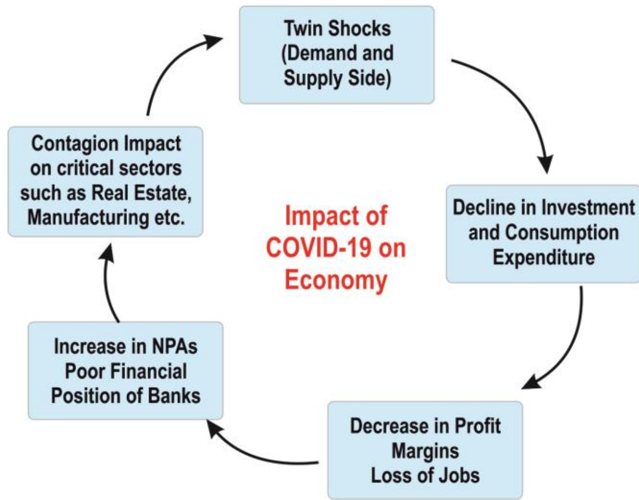
No Guaranteed Benefits: The Industrial workers are automatically guaranteed social security benefits such as Provident Funds, Insurance, Maternity benefits etc. However, such benefits are not automatically extended to Gig Workers. The Central and State Governments are required to come up with schemes to provide these benefits. So, the social security benefits for the Gig Workers depend upon the political will of the Government.

No Guaranteed Contribution by Aggregator Platforms: The Code on Social security mandates the Industries employing workers above a certain threshold level to compulsorily contribute towards social security benefits such as Provident Fund and Insurance. However, as far as Gig Workers is concerned, the language in the code does not provide for compulsory contribution by the aggregator platforms. Hence, it is left open to the Government whether to seek contribution from the aggregator platforms or not.

No legal Rights for Gig Workers: The Industrial workers are given legal rights over the various aspects of work such as Payment of Minimum wages, safe working conditions, right to strike, right to form trade Unions etc. However, such rights have not been recognised in case of Gig workers.

►DECODING THE ECONOMIC SLOWDOWN IN INDIA

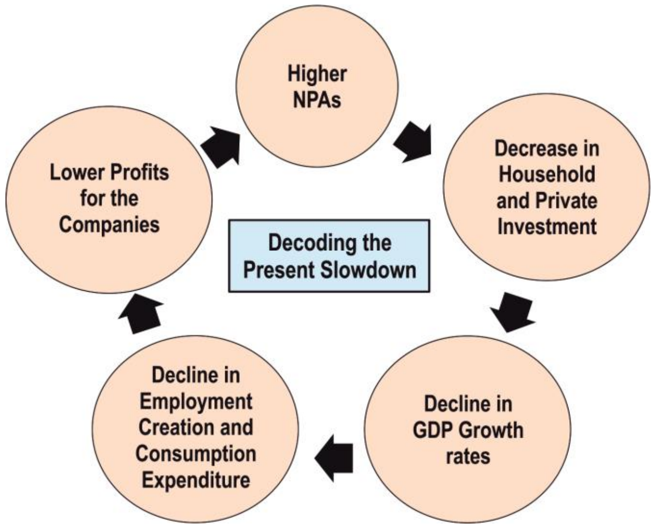
The Indian Economy has registered a negative GDP growth rate of 24% in the first Quarter of 2020-21. India is also set to suffer the worst recession in the last 41 years since 1979. Opinions are divided over the exact cause of this contraction- COVID-19 or deep-rooted structural problems in Indian economy.



The lockdown imposed due to the outbreak of CoVID-19 has impacted both demand and supply side simultaneously leading to twin shocks, which is considered to be quite unprecedented.

However, the present contraction is not entirely on account of COVID-19. Even in the absence of COVID-19, the Indian Economy would have still faced slowdown, though not on a scale which is observed presently. The COVID-19 has actually accentuated the factors that contribute to economic slowdown.

The Economic survey 2019-20 had highlighted that slowdown is because of the inability to sustain a virtuous economic cycle. The Investment rate started declining from 2012-13 due to the poor financial position of Banks. However, the Indian economy continued on a higher GDP growth trajectory for the next 4 years. Ultimately, the decline in Investment led to decline in GDP growth rates from 2016-17 due to lagged effect. The Consumption expenditure started declining in the first quarter of 2019-20 due to lagged effect of 2-3 years. Hence, the present economic slowdown can be traced to 2012-13 when the Investment rate started declining.



So far, the Government is withholding expenditure and desisting from announcing fiscal stimulus measures in order to contain Fiscal Deficit. Unprecedented times need unprecedented measures. Hence, Government should not unduly be worried about the Fiscal Deficit and instead provide fiscal stimulus measures to enhance Investment, create employment opportunities, boost consumption and thus increase GDP growth in future.

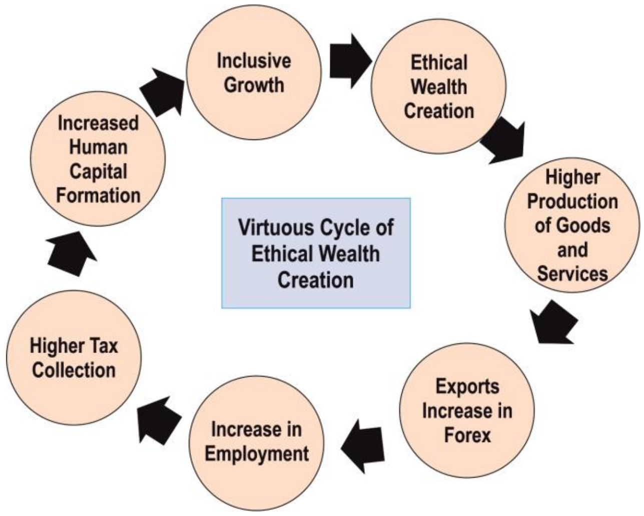
►ETHICAL WEALTH CREATION IN INDIA

Contemporary evidence and civilisational ethos (as reflected in Arthashastra) show that Ethical Wealth Creation through Invisible hand of market supported by hand of Trust can enable India to achieve vision of $ 5 trillion economy.

For more than three-fourths of known economic history, India has been the dominant economic power globally. During much of India's economic dominance, the economy relied on the invisible hand of the market for wealth creation with the support of the hand of trust. Specifically, the invisible hand of markets, as reflected in openness in economic transactions, was combined with the hand of trust by appealing to ethical and philosophical dimensions.

The Economic Survey 2019-20 has highlighted number of strategies promote Ethical wealth creation:

- Liberalised Sectors (Banking, Insurance) grow significantly faster than closed sectors (Railways, Coal). Hence, the need to **liberalise sectors (including privatisation of CPSEs)** to unleash creative destruction.
- Promote **"pro-business" policies** and give up **"pro-crony" policies** that may favour specific private interests.



- **Eliminating needless government intervention** such as Essential Commodities Act, Regulation of Drug Prices etc.
- Create Jobs by **Integrating "Assemble in India" with "Make in India"**.
- India's banking sector is disproportionately under-developed given the size of its economy and hence, there is a **need to enhance efficiency of PSBs**.
- **Promote Entrepreneurship at district level**.

India was the dominant economic power globally for a major part of world's economic history on account of Ethical Wealth creation. Hence, India needs to learn from its economic history to become $ 5 trillion economy.

►INTEGRATION OF BEHAVIORAL ECONOMICS INTO PUBLIC POLICIES

Behavioural economics is a branch of economics which seeks to understand socio-psychological factors that affect decision making and then uses various strategies to nudge individuals to act in a desired manner.

The Economic Survey 2018-19 has highlighted that integration of Behavioural economics into Public policies can have desirable outcomes:

- **Default Bias**: Reluctance of people to change the default option can be leveraged for higher enrolment in Insurance, Sukanya Samridhi yojana, Give-it up subsidy.
- **Making it easy to Choose:** Simplification of procedures to make it easier for women to report incidences of harassment, file tax etc.
- **Emphasize social norms**: Honour honest tax payers for increased tax compliance, project women as role models to end gender-based discrimination etc.

- **Repeated reinforcement** of positive outcomes helps sustain good behaviour in Swachh Bharat, Jan Dhan Yojana etc.
- **Address flawed mental models** to emphasize gains from vaccination, breastfeeding etc.
- **Meaningful naming of schemes** such as Ayushman Bharat, Ujjwala, Namami Gange etc.

Hence, we need to set up a dedicated unit under NITI Aayog to explore the unlimited possibilities of employing Behavioural economics and promote socio-economic development.

►DATA OF THE PEOPLE, BY THE PEOPLE, FOR THE PEOPLE

India has the second largest Internet base accounting for 12% of global users leading to generation of huge data. This is accompanied by decrease in marginal cost of data due to increased efficiency of Data gathering, falling prices of data storage etc.

The Economic Survey 2018-19 has highlighted that Just like how Private sector uses the data to maximize its profits, the Government should use the data to promote Public welfare. In a way, data should be treated as Public Good to promote growth and development:

Evidence based Policy Making through collecting, processing and analyzing data related to Government schemes to improve their outcomes. Examples include MGNREGA, RTE, National Health ID etc.

Empowering people through dissemination of data. Examples include E-NAM, Weather-related Information, Digi Locker etc.

Ensuring Transparency and Accountability to promote Good Governance by making available Government related documents.

Better Targeting of Welfare Programmes through Aadhaar, JAM Trinity, NREGASoft etc.

One of the biggest constraints in harnessing Data is that the Information related to Citizens is scattered across numerous government bodies. Hence, there is a need to merge these distinct datasets to optimally harness the data for the public good.

►INDIA'S PERFORMANCE ON SDGS

INDIA'S PROGRESS ON SUSTAINABLE DEVELOPMENT GOALS (SDGs)

The year 2020 marks the fifth anniversary of adoption of 2030 Agenda for Sustainable Development. India's progress on 17 SDGs is quite critical since India accounts for 1/6 of the global population. In order to track India's progress on meeting SDGs, the NITI Aayog had unveiled SDG India Index in 2018.

INDIA'S PERFORMANCE ON SDG INDIA INDEX

- India's composite score has improved from 57 in 2018 to 60 in 2019, thereby showing noticeable progress.
- All three states that were in the 'Aspirant' category (with score/s in the range of 0–49)—Uttar Pradesh, Bihar and Assam—have graduated to the 'Performer' category (50–64). Thus, presently, there are no states in the Aspirant category.
- Top Performing States: Kerala, HP, Andhra Pradesh, Telangana and Tamil Nadu.
- Bottom ranked States: Bihar, Jharkhand, Arunachal Pradesh, Meghalaya and UP.
- Top Performing UTs: Chandigarh, Puducherry, Dadra and Nagar Haveli.

SDG NEXUS: A NEW PARADIGM APPROACH

There are linkages among the various SDGs and have strong impacts on reinforcement of policies. In this regard, the 'nexus' approach employs the principles of integrating management and governance across sectors and scales. This demands greater co-ordination across institutions at local, national and international levels.

EXAMPLES OF NEXUS IN SELECT SECTORS

Education and Electricity Nexus: It has been observed that basic infrastructure like electricity, separate toilets for girls and boys in schools create a healthy and positive environment at schools. It is observed that with electricity, the schools' access to modern methods and techniques of teaching helps holistic development of students and increase their attraction towards learning. Globally it is observed that schools with electricity outperform the non-electrified schools in terms of staff-retention, drop-outs and other educational indicators. It is observed that States with lower literacy rates have low electricity rates at the schools and vice-versa.

Health and Energy Nexus: There is a positive relationship between the electricity consumption and fall in the Infant Mortality Rate (IMR) in the country. Many of the health improvement schemes- providing paediatric care, new-born emergency services, and successful vaccination rely heavily on the availability of electricity at the health centres.

►FINANCIAL INCLUSION

The promotion of Financial inclusion is considered to be essential to promote economic growth and development across the world. Access to formal finance can boost ***job creation, reduce vulnerability to economic shocks and increase investments in human capital***. Seven of the United Nations Sustainable Development Goals (SDG) of 2030 view financial inclusion as a key enabler for achieving sustainable development worldwide.

FINANCIAL INCLUSION IN INDIA

Definition: According to Raghuram Rajan Committee on Financial Sector reforms, Financial Inclusion refers to universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial services such as insurance and equity product.

Importance of Financial Inclusion: Financial Inclusion has multiplier effect in boosting economic output, reducing poverty and income inequality. Financial inclusion of women is important to promote gender equality and women empowerment.

Extent of Financial Inclusion: As per census 2011, only 58% of households are availing banking services in the country. However, as compared with previous census 2001, availing of banking services increased significantly largely on account of increase in banking services in rural areas.

Causes of Financial Exclusion: Lack of Financial Literacy; Dominance of Bank Branches in Urban Areas; lack of requisite documents to open Bank accounts; Lack of awareness about Insurance products; Lack of Surplus Income; Poor quality of services rendered.

Important Measures to promote Financial Inclusion: Nationalisation of Banks (1969 and 1980); Setting up of Regional Rural Banks (RRBs); Priority sector lending norms; Opening of Basic Savings Bank Accounts (BSBA); PM Jan Dhan Yojana; Setting up of Payment banks and Small Finance Banks; Launch of UPI, BHIM app etc.

STRATEGY FOR FINANCIAL INCLUSION

The RBI believes that the Financial Inclusion depends upon 3 parameters- ***Financial Inclusion policies, Financial Literacy and Consumer trust***. The Consumer confidence and trust can be strengthened by providing for effective Grievance redressal mechanism. Accordingly, based on such a strategy, the RBI has identified certain pillars to promote financial inclusion.

STRATEGIC PILLARS FOR FINANCIAL INCLUSION

Universal Access to Financial Services: Digital financial infrastructure should be set up by all the banks as well as other non-bank entities to promote efficiency and transparency in the services offered to customers.

Providing Basic Bouquet of Financial Services that include a Basic Savings Bank Deposit Account, credit, a micro life and non-life insurance product, a pension product and a suitable investment product. **Access to Livelihood and Skill Development:** The new entrants into the financial inclusion must be must aware of the government initiatives to promote skill building such as National Rural Livelihood Mission (NRLM), PM Kaushal Vikas Yojana (PMKVY) etc.

Financial Literacy and Education: Financial literacy modules with specific target audience orientation (e.g. children, young adults, women, retired employees etc.). These modules can be in the forms of Audio-Video/ booklets and should be made available for understanding the product and processes involved.

Customer Protection and Grievance Redressal by setting up effective grievance redressal mechanism at different levels.

Effective Co-ordination between the key stakeholders i.e. Government, the Regulators, financial service providers, Telecom Service Regulators, Skills Training institutes etc. to make sure that the customers are able to use the services in a sustained manner.

►TOURISM SECTOR

PRESENT SCENARIO OF INDIAN TOURISM

According to the World Travel and Tourism Council, India ranked 7th amongst 185 countries in term of travel and tourism sector's total contribution to GDP in 2017. Tourism industry in the year 2017 contributed 9.4% of the GDP and generated 8% of the total employment in the country, thus making it a one of the largest industries in service sector.

HOW TOURISM CAN CONTRIBUTE TO INCLUSIVE GROWTH?

- Potential to grow at a high rate and ensure consequential development of the infrastructure at the tourist destinations.
- Travel and tourism sector is estimated to create 78 jobs per million rupees of investment compared to 45 jobs in the manufacturing sector for similar investment.
- Provides employment opportunities for both skilled and unskilled workers.
- Tourism provides more benefits for women employment.

- Potential to stimulate other economic factors through its forward and backward linkages with a host of sectors like agriculture, manufacturing, transport, hospitality, education, health, banking, etc

GOVERNMENT INITIATIVES TO BOOST TOURISM

Swadesh Darshan Scheme, Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive (PRASHAD), Adopt a Heritage Project, Incredible India 2.0 Campaign etc.

CONSTRAINTS IN TOURISM SECTOR

- **Entry/Exit of Tourists**: Despite the introduction of an e-visa facility, visitors find the process of applying for a visa still cumbersome. Further, awareness about the e-visa facility remains low.
- **Infrastructure and connectivity:** Deficiencies in infrastructure and inadequate connectivity hamper tourist visits to some heritage sites.
- **Tourism segments or circuits**: India has various tourist destinations but few circuits or segments such as the Golden Triangle (Delhi-Agra-Jaipur).
- **Promotion and marketing:** Although it has been increasing, online marketing/branding remains limited and campaigns are not coordinated.
- **Skills:** The number of adequately trained individuals for the tourism and hospitality sector is a key challenge to giving visitors a world-class experience.

►NEED FOR BOOSTING INNOVATION IN INDIA

PRESENT STATUS OF R&D IN INDIA: The Gross expenditure on R&D (GERD) in the country has been consistently increasing over the years and has nearly tripled from Rs. 40,000 crores in 2007- 08 to Rs. 1.2 lakh crores crore in 2018-19. India's per capita R&D expenditure has increased to PPP $ 47.2 in 2017-18 from PPP $ 29.2 in 2007-08.

CONCERNS WITH R&D ECOSYSTEM IN INDIA

The Economic Survey 2017-18 in its chapter "Transforming Science and Technology" has highlighted number of problems with R&D ecosystem in India. Some of the concerns are as highlighted below:

Stagnation in R&D expenditure as percentage of GDP: Even though the R&D expenditure has increased in terms of absolute value, the R&D Expenditure as % of GDP at 0.7% has remained stagnant in the last 2 decades.

- Lower Expenditure on R&D: India's spending on R&D is well below that in major countries such as the US (2.8), China (2.1), Israel (4.6) and South Korea (4.6).
- Lower Share of Private Sector Investment: Unlike developed economies, the R&D expenditure in India is mainly driven by public sector.
- Lower R&D investment in Health: The Public Sector investment in R&D is mainly driven by Defence, Space and Atomic Energy. The amount of investment in critical sector such as Health (R&D investment by ICMR) is too low.
- Role of Universities in India: Universities in many countries play a critical role in both creating the talent pool for research as well generating high quality research output. However, the Universities in India have largely focussed only on teaching.

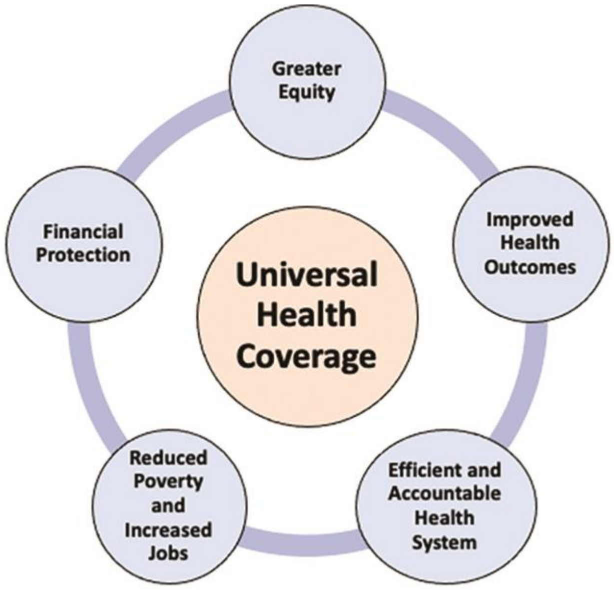
RECOMMENDATIONS TO IMPROVE R&D ECOSYSTEM IN INDIA

- Improve Math and Cognitive Skills at the school level. (Unless the foundation of Primary Education is strong, the superstructure of R&D cannot be strengthened)
- Encourage Investigator-led Research: Provide necessary funding and support to the researchers to take up research.
- Increase funding by Private Sector and State Governments.
- Leverage scientific diaspora: There are today more than 100,000 people with PhDs, who were born in India but are now living and working outside India. There is a need to attract these scientists back to India.
- Improve the culture of Research in Universities.

►UNIVERSAL HEALTH COVERAGE IN INDIA- CONSTRAINTS AND STRATEGIES

The recent COVID-19 pandemic has underscored the importance of healthcare system in a country and its key linkages to other sectors. It has clearly highlighted that a healthcare crisis can transform into an economic and social crisis.

DEFINING UNIVERSAL HEALTH COVERAGE (UHC)



UHC can be defined as ensuring equitable access for all Indian citizens quality health care which encompasses promotive, preventive, curative and rehabilitative care. It should be based upon 4 A's - Availability, Accessibility, Affordability and Accountability. The Universal Health coverage should be provided by both Government and Private sector. To facilitate the private sector to provide UHC, the Government should act as an enabler and facilitator.

PROBLEMS IN ENSURING UHC IN INDIA

Lower Expenditure on Health: The Combined expenditure of Centre and States on Health is around 1.5% of India's GDP, which translates into Rs 3 per person per day. It is much below the target of 2.5% as set under the National Health Policy, 2017. Countries such as Bhutan (2.5%) and Sri Lanka (1.6%) spend more money on health as compared to us.

Low Insurance Penetration: 86% of people in rural areas and 82% in urban areas do not have access to insurance coverage. Problems- Forced to use their meagre savings, borrow money, or delay the treatment. Implications:

(a) perpetuate vicious cycle of poverty (poor people remain poor due to higher health costs)

(b) Push the above poverty line people back to BPL. (Drives 55 million Indians into poverty, more than the population of South Korea (51.1 million))

Out-of-pocket expenditure on Health: In case of India, Government spends only 35% of healthcare expenditure, while the major chunk 65% of expenditure is incurred by people themselves. At the global level, the average out-of-pocket expenditure is hardly around 18%.

Lack of Accessibility: Most of the secondary and tertiary care hospitals are in Tier-1 and Tier-2 Cities. Similarly, most of the doctors are unwilling to practice in Rural areas.

Lack of Affordability: The contribution of private sector in healthcare expenditure in India is around 80 percent while the rest 20 percent is contributed by Public Sector. The private sector also provides for 58 percent of the hospitals and 81 percent of the doctors in India. However, since the private sector hospitals work on the profit motive and charge high fees, the private sector hospitals do not address the needs of the poor patients.

CRITICAL ANALYSIS OF AYUSHMAN BHARAT SCHEME

Details: Ayushman Bharat seeks to provide for Universal health coverage (UHC) by adopting two approaches (a) Creation of 1.5 lakh Health and Wellness centres (HWCs) and Pradhan Mantri Jan Arogya Yojana (PM-JAY). The PM-JAY aims at providing a health insurance cover of Rs. 5 lakhs per family per year for secondary and tertiary care hospitalization.

COVERAGE: 50 crore people who belong to bottom 40% of India's population. Beneficiaries are identified through socio-economic caste census (SECC).

ACHIEVEMENTS

The Economic Survey 2020-21 has highlighted the achievements of PM-JAY by considering two important aspects:

- PM-JAY was implemented in 2018. Hence, health indicators measured by National Family Health Surveys 4 (in 2015-16) and 5 (in 2019-20) can be compared to understand the impact of this scheme.
- Some of the states such as West Bengal, Odisha, Telangana etc. are not implementing the PM-JAY scheme. Hence, to analyse the impact of PM-JAY scheme, the health outcomes in these states can be compared with rest of India.

BENEFITS

Improvement in Health Insurance: The proportion of households covered under health insurance increased by 54 per cent from NFHS 4 to NFHS 5 in the states that adopted PMJAY. However, it decreased by 10 per cent in the states that did not adopt PMJAY.

Improvement in Health Outcomes (such as IMR, MMR, Access to Family Planning, Institutional births etc) in the states that have adopted PMJAY.

CONCERNS AND CHALLENGES

Low package rates: The government has published the rates that insurance companies would pay hospitals for around 1500 procedures covered under the scheme. These rates have become a sticking point for hospitals, which have criticised them as arbitrary and low. For example, the price of Caesarean section, at Rs 9,000 for five days of hospital stay, food and consultation. Implications- Reduce the quality of healthcare or make it unviable for private hospitals.

Frauds: Under the scheme, though the card is issued to the head of the family, any number of family members may be enrolled to avail benefits under the programme. As such, people who do not meet the eligibility criteria for Ayushman Bharat may either get false poverty certificates to get a card themselves or claim false relationships to people who have these cards.

Politicisation of Scheme: Some of the states such as West Bengal, Odisha, Telangana etc. have decided not to implement PM-JAY Scheme.

Budget allocation for PM-JAY has stagnated at Rs 6,400 crore. (Needed amount- around Rs 1 lakh crores on annual basis)

Low Coverage of beneficiaries

Absence of Private healthcare facilities in backward states.

Unethical practices by private sector wherein hospitals are performing unnecessary procedures (for example, Caesarean operation instead of normal delivery)

STRATEGIES TO ENSURE UNIVERSAL HEALTH COVERAGE IN INDIA

We can learn from countries such as South Korea, Singapore, Thailand, Switzerland, Sri Lanka etc. which have provided for universal health care. This can be done through

(a) Steadily increasing the public expenditure on health

(b) Enhancing the capacity of the public healthcare facilities to utilize funds efficiently.

(c) Expanding the coverage of Healthcare Insurance

(d) Government acting as enabler and facilitator to enable private sector to provide affordable healthcare.

Declaration of Right to Health as Fundamental Right: Presently, the Right to health is not explicitly included under the Indian constitution as Fundamental right. To ensure greater commitment of the government towards health, there is a need to include health as a constitutional and fundamental right as provided under Brazilian constitution.

Reducing Information Asymmetry in Private healthcare: The Economic Survey 2020-21 has highlighted the problem of Information asymmetry in the private healthcare system leading to exploitation of the patients, higher costs and poor-quality delivery. Hence, there is a need to set up Information Utilities that would give ratings to the private hospitals and doctors based upon the quality of healthcare delivery. Such a rating mechanism would enable the people to choose the best doctors (or hospitals), reduce the information asymmetry and force the private healthcare system to be cost-efficient and provide high quality service delivery.

Devising Universal Health Coverage: The National Health Policy 2017 seeks to progressively achieve the Universal health coverage by enhancing the public health expenditure to 2.5% of the GDP in a time bound manner. The Srinath Reddy Committee which submitted its recommendations in 2010 has highlighted as to how the Universal Health coverage can be achieved in India. This can be done in the following manner:

- Both Central and State Governments should increase public expenditures on health to at least 3% of GDP by 2022. The increase in the public expenditure can be possible by increasing the Tax-to-GDP ratio of the Government.
- The Government must ensure availability of free essential medicines by increasing public spending on drug procurement.
- Since the primary health care forms the foundation of the health care system, the Government must spend at least 70% of its fund for improving the primary health care system.

►LEVERAGING STRUCTURAL TRANSFORMATION IN RURAL INDIA

The Rural India is undergoing structural transformation and diversification towards other sectors of the economy. However, this structural transformation is not accompanied by employment creation. In fact, the rural India is witnessing negative Employment growth rate since 2004-05.

PRESENT STATUS OF RURAL ECONOMY

Share of Population: As per the 2011 Census, **68.8% of India's population** and **72% of workforce** resided in rural areas.

Structural Transformation: The rural areas account for **95% of the agriculture output, 50% of the manufacturing output and around 25% of the**

service sector output. The factors responsible for the growth of Rural Non-Farm Economy (RNFE) are, **lower productivity of farms, sluggish growth rate of agriculture, shrinking farm size, increasing cultivation cost**, **increased wage rates in non-farm sector** etc.

Jobless Growth: Despite structural transformation, the overall employment has not even doubled. In fact, between 2005-12, the rural India witnessed negative employment growth rate of -2.8%.

Defeminisation of Rural workforce: Between 2004-05 to 2011-12, almost 33 million workers left agriculture. Out of which, 27 million were females (81%) and 6 million were males (19%). Thus, clearly shows that contrary to a common perception, more number of females have left workforce in the rural areas. Some of the reasons for the defeminisation include

- Increased enrolment in education
- Increase in household income which reduced the need for the females to work to support the household income
- lack of skill to get well paid non-farm job
- Manufacturing jobs away from the place of the habitation

LEVERAGING STRUCTURAL TRANSFORMATION THROUGH SECONDARY AGRICULTURE

The Dalwai panel has recommended boosting Secondary Agriculture to leverage structural transformation, create employment opportunities and boost rural economy.

BENEFITS

Holistic development of rural areas by transforming rural areas from consumers to producers of Goods.

Efficient utilisation of resources such as land and labour through various activities such as honeybee keeping, mushroom cultivation, backyard poultry etc.

Contributes to agriculture by providing Inputs, enhancing productivity and reducing post-harvest losses.

Develop human and capital resources to replicate Start-up India at village level.

►MIDDLE INCOME TRAP: LATE CONVERGER STALL

Late Convergence Stall refers to the phenomenon wherein middle-income country that hopes to grow into high-income country fails to achieve its goal. Instead, it gets trapped in middle income status. (Middle Income Trap).

India moved from a low income to lower middle income country in 2008, and is now attempting to become upper-middle income country. However, this convergence may slow down for the late convergers like India, particularly after the global financial crisis (GFC).

The Economic Survey 2018-19 has highlighted four challenges:

Backlash against Globalisation: Early convergers like Japan and South Korea posted higher growth rates during their periods of convergence due to export-led growth. However, adoption of protectionist policies by advanced economies post GFC makes convergence difficult for India.

Thwarted structural transformation: Development entails shifting resources from low productivity (Agriculture) to high productivity sectors (Manufacturing) and from informal to formal sectors. However, share of manufacturing sector to India's GDP has remained stagnant since 1991. Similarly, 90% of workers are employed as informal workers.

Human Capital Regression: India underspends on Education, Health etc. which in turn adversely affects human capital formation. This makes it difficult for us to leverage disruptive technologies and focus on Industrial Revolution 4.0.

Climate-Induced stress: Successful economic transformation takes place when resources move from agriculture to other sectors. This is possible only when agricultural productivity is higher. However, productivity of agriculture has remained quite lower. Going forward, climate change would further worsen the condition.

Indeed, India has registered higher growth rates in recent past. But this fast growth has occurred with limited transfer of labour from low productivity to high productivity sectors. As of now India may not be faced with a "Late Converger Stall", but need to act in time to avoid it.

►INDICATIVE PLANNING- BENEFITS AND CHALLENGES

After registering a prolonged Hindu growth rate, India adopted the indicative planning process since 1991. Wherein, government tried to set

objectives and targets and private sector is encouraged to achieve them. Over past three decades there have been a mix bag of outcomes on indicative planning.

BENEFITS OF INDICATIVE PLANNING

Collaborative Approach: between Centre, States and Private sector.

Centralised targeting: This planning helps to make goals which are common at national needs.

Efficiency enhancement: This planning has helped to rope in private sector efficiency which ultimately raised productivity & GDP.

Decentralisation of Plan Execution: Actual implementation is done by local units. 73rd and 74th amendment acts are good example.

Cooperative Federalism: Best example is National Infrastructure pipeline project wherein centre, state and private would together bring

development to India.

Democratic in nature: As this planning has provided participation of all it suits the needs of a mixed economy.

Despite commendable successes and benefits, this planning process has inherent limitations

Non-binding: indicative planning is largely a non-binding exercise. Government cannot force or penalise private sector for target completion.

Federal Issues: Centre and state governments have not been on the same page for policy execution.

May cause withdrawal of state from its social role: as argued by Amartya Sen and Jean Dreze.

Poor accountability Mechanism: even if goods and targets are not being met by the authorities.

Thus, current set up of indicative planning is fair enough to continue. However, a well-defined outcome evaluation mechanism could be set up

at all levels of policy and planning.

►DEBT SUSTAINABILITY IN INDIA: NEED FOR COUNTERCYCLICAL FISCAL POLICY

COVID-19 pandemic caused unprecedented economic crisis for India resulting in decline of government revenues as economic activity halted, however, government expenditure had to be stepped up to protect lives and livelihoods. This has increased fiscal deficit to more than 9.5% of GDP and general government debt of 70%.

Government in the budget has called for an expansionary fiscal policy for sustainable long term growth with fiscal deficit estimated to be 6.8%. This has raised concerns over sustainability of India's debt.

REASONS FOR SUSTAINABILITY OF INDIA'S DEBT

1. For India, GDP growth rates regularly were more than interest rates. The interest rate growth differential (IRGD) is expected to remain negative for India in foreseeable future.
2. India's public debt to GDP has been significantly low compared to high global debt levels.
3. Public debt for India has declined since 2003 and has been stable since 2011.
4. External debt is only 2.7% of GDP thus low foreign exchange risk. India has fifth largest forex reserves.
5. 70% of total public debt is with Central Government which is desirable.
6. Public debt has long maturity profile tends to limit rollover risk, and insulates debt portfolio from interest rate volatility.

COVID-19 pandemic has led to a demand shock. An expansionary and countercyclical fiscal policy during this time will help by:

1. Multipliers of fiscal spending are disproportionately higher during economic crisis that economic booms
2. Boost potential growth with public investment that raises productivity. Ex. Infrastructure
3. When private sector is risk averse, public investment can lead to virtuous cycle of investment

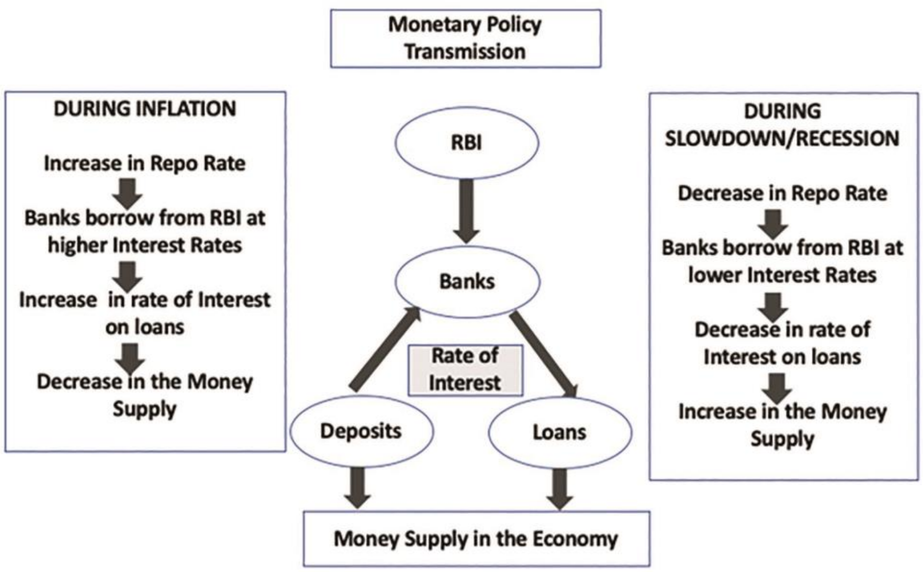
Thus, India should pursue countercyclical fiscal policy and take up debt in times of crisis to boost economic growth in a sustainable manner.

SECTION-5

BANKING AND FINANCE

►MONETARY POLICY TRANSMISSION AND EXTERNAL BENCHMARKING OF INTEREST RATES

Monetary policy transmission refers to the process through which changes in the policy rates (such as Repo) by the RBI leads to commensurate changes in the rates of Interest of the Banks.



In case of India, while increase in Policy rates get transmitted immediately, the rate cuts get transmitted with a significant amount of lag leading to ineffectiveness in increasing money supply during slowdown. **Reasons for poor Monetary Policy TRANSMISSION**

- **Over reliance of Banks on Public Deposits** and **lower dependency on RBI for borrowing** through Repos.
- **Deposits with maturity of one year and above** constitute more than 50% of total deposits.
- **Competition from other financial instruments** such as Small savings Deposits (PPF, NSC etc)
- **Higher NPAs**
- **Opaqueness in the calculation of MCLR**

Benchmark for Fixing Interest rate on Loans	Year of Adoption	How Interest rate is calculated?	Remarks
Marginal Cost of Lending Rate (MCLR)	2016	• Repo Rate • Rate of Interest on New Deposits. • Cost of CRR • Operational Expenses	• Internal Benchmark • Other factors such as Operational Expenses taken into consideration and hence Opaque • Poor Monetary Policy Transmission
External Benchmarking (For Floating rate loans)	2019	4 options to link rate of Interest on loans: Repo Rate; T-91; T-182 or benchmark published by FIBIL.	• External Benchmark • Transparent • Higher Efficiency in Transmission.

In order to address these problems, the RBI has asked the Banks to link all the floating rate loans to any of the 4 External benchmarks.

BENEFITS

- Unlike MCLR, External benchmark is influenced solely by the policy rates leading to higher efficiency.
- Greater transparency.
- Borrowers know the profit margin fixed by various banks and hence can choose accordingly.

►TWIN BALANCE SHEET PROBLEM: WHAT, WHY AND HOW OF NPAS?

REASONS FOR INCREASE IN NPAs

Over-optimism of Banking Sector: A larger number of bad loans originated in the period 2006-2008 when economic growth was strong, and previous infrastructure projects such as power plants had been completed on time and within budget. It is at such times that banks did not follow diligence in extending fresh loans anticipating future economic growth.

Slow-Growth: The financial crisis of 2008 led to slower economic growth which in turn affected the profits of the companies and reduced their ability to pay back the loans on time.

External Factors: To counter the aftermath of the financial crisis and declining growth, major central banks globally adopted the easy money policy which also resulted in easy liquidity in emerging markets such as India. This phenomenon pushed up asset prices and led to inflation

Regulatory and Policy Risks: The past few years in India saw a volatile regulatory framework which built stress in certain industries. Some examples include Mining ban in certain southern Indian states, Decision to cancel and re-auction the telecom airwaves etc. This caused significant financial and operating stress in companies engaged in the mining, telecom and infrastructure sectors which had a cascading effect on overall investments in the Indian economy.

Industry Specific Risks: There are industry-specific reasons that cause a rise in NPA levels in India. Sectors which are seeing increased stress are aviation, textile and telecom among others. The higher NPAs in aviation sector could be attributed to high cost of aviation turbine fuel which accounts for 45% of total operating costs, as compared to the global average of 30%. Similarly, Increasing competition and consequently irrational pricing behaviour among telecom players has led to higher stress levels.

Poor Credit Appraisal System: The Banks have not developed sufficient capability to undertake credit appraisal before giving loans.

Diversion of Loans: The poor end-use monitoring system of the Banks has led to diversion of funds by the companies for other wasteful purposes.

Wilful Defaulters: There has been increase in the number of wilful defaulters, who have failed to repay back the loans inspite of having the capability to do so. This can be attributed to lack of proper mechanism to deal with wilful defaulters.

Red-Tapism: Delays in government approvals led to increase in the number of stalled projects.

Lack of Policy foresight: Delay in formulation of Insolvency and bankruptcy code for faster resolution of NPAs.

Frauds: The system has been ineffective in bringing even a single high profile fraudster to book. It was only after the NPA crisis, the RBI set up a fraud monitoring cell to coordinate the early reporting of fraud cases to the investigative agencies.

Ineffective Recovery Tribunal : There has been undue delay in the resolution of cases before the debt recovery tribunals leading to higher NPAs.

Political Interference in working of PSBs: The NPAs are mainly concentrated in the Public Sector Banks which could be linked to their poor governance and political interference.

Priority Sector Lending: The lending by the Banks to priority sectors such as Agriculture and MSMEs has also contributed to NPAs.

Credit Culture: The announcement of farm loan waivers by the Central Government and various state governments has affected the credit culture in India.

Lack of Integrated database on Credit Information: Presently, the credit related information is captured by multiple agencies without proper coordination. Further, the RBI's proposal to create Public Credit Registry faces legal challenges.

IMPACT OF HIGHER NPAs

Profitability: On an average, banks are providing around 25% to 30% additional provision on incremental NPAs which has direct bearing on the profitability of the banks.

Asset (Credit) contraction: The increased NPAs put pressure on recycling of funds and reduces the ability of banks for lending more and thus results in lesser interest income. It contracts the money stock which may lead to economic slowdown.

Liability Management: In the light of high NPAs, Banks tend to lower the interest rates on deposits on one hand and likely to levy higher interest rates on advances. This may become hurdle in smooth financial intermediation process and hampers banks' business as well as economic growth.

Capital Adequacy: As per Basel norms, banks are required to maintain adequate capital on risk-weighted assets. Every increase in NPA level adds to risk weighted assets which requires the banks to shore up their capital base further. In case of PSBs, it may put additional burden on the Government for recapitalisation of PSBs.

Shareholders' confidence: The increased NPA level is likely to have adverse impact on the bank business as well as profitability thereby the shareholders do not receive a market return on their capital and sometimes it may erode their value of investments.

Public confidence: Credibility of banking system is also affected greatly due to higher level NPAs because it shakes the confidence of general public in the soundness of the banking system.

Thus, the increased incidence of NPAs not only affects the performance of the banks but also affect the economy as a whole. ***In a nutshell, the high incidence of NPA has cascading impact on all important financial ratios of the banks viz., Net Interest Margin, Return on Assets, Profitability, Dividend Payout, Provision coverage ratio, Credit contraction etc***., which may likely to erode the value of all stakeholders including Shareholders, Depositors, Borrowers, Employees and public at large.

WHAT HAS BEEN DONE TO ADDRESS THE PROBLEM OF GROWING NPAS?

Steps Taken by RBI

Loss Recognition: The RBI has mandated the banks to carry out Asset Quality Review (AQR) in order to know the true status of their Balance Sheets and prevent them from ever greening of Loans.

Prompt Corrective Action (PCA): The RBI monitors the financial health of the Banks through various parameters such as NPA, Capital Adequacy etc in order to ensure their soundness and prevent them from further losses.

Identification of Incipient Stress: The RBI has mandated the Banks to identify the incipient stress in their loans by classifying Special Mention Account (SMA) into 3 different categories so as to enable the Banks to take corrective action before classifying them as NPAs.

Simplification of Resolution of Bad Loans: The RBI has replaced multiple schemes such as Strategic Debt Restructuring (SDR), Sustainable Structuring of Stressed Assets (S4A), 5/25 Scheme etc with comprehensive Prudential Framework for resolution of stressed assets.

Collection of Credit Information: The RBI has set up Central Repository of Information on Large Credits (CRILC) on all borrowers having an aggregate exposure of Rs 5 crore and above. It was created for early recognition of financial distress, enabling prompt action for resolution and fair recovery for lenders and as part of a framework for revitalising distressed assets in the economy.

STEPS TAKEN BY GOVERNMENT

Insolvency and Bankruptcy Code, 2016 (IBC) has been enacted to create a unified framework for resolving insolvency and bankruptcy matters.

The **Banking Regulation Act, 1949** has been amended to provide for authorisation to RBI to issue directions to banks to initiate the insolvency resolution process under IBC.

The **Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002** has been amended to make it more effective with provision for three months imprisonment in case the borrower does not provide asset details and for the lender to get possession of mortgaged property within 30 days.

Six new Debts Recovery Tribunals have been established to expedite recovery.

Indradhanush Mission: Reforming the Governance of PSBs and infuse more capital into PSBs.

Project Sashakt: It has been adopted on the basis of recommendations of Sunil Mehta Committee, which provided for 5-pronged strategy to deal with the problem of NPAs.

►IDEA OF BAD BANK- PROS AND CONS

Recently, the Government has announced the formation of "National Asset Reconstruction Company Limited (NARCL)" and "India Debt Resolution Company Ltd. (IDRCL)" as a Bad Bank to deal with the problem of NPAs.

IDEA OF BAD BANK

Global Examples: Early adopter in 1990s- US (Melon Bank) and Sweden (Securum). Similarly, other countries such as Malaysia, Finland, Belgium, Indonesia etc. have set up Bad Banks.

India: The Economic Survey 2016-17 had proposed to set up Bad Bank, which should be called as Public Asset Rehabilitation Agency (PARA). The PARA should be funded and owned by the Government of India. Such a proposal was also put forward by the Indian Banks Association (IBA) recently in June 2020.

DIFFERENCE BETWEEN BAD BANK AND NATIONAL ASSET RECONSTRUCTION COMPANY LIMITED (NARCL)

The Bad Bank, initially proposed by the Economic Survey 2016-17 was to be set and owned by the Government. However, NARCL has been set up by banks themselves. So, one major difference is in nature of ownership. However, since the nature of role performed by them is same, the terms "Bad Bank" and "ARC" can be used interchangeably.

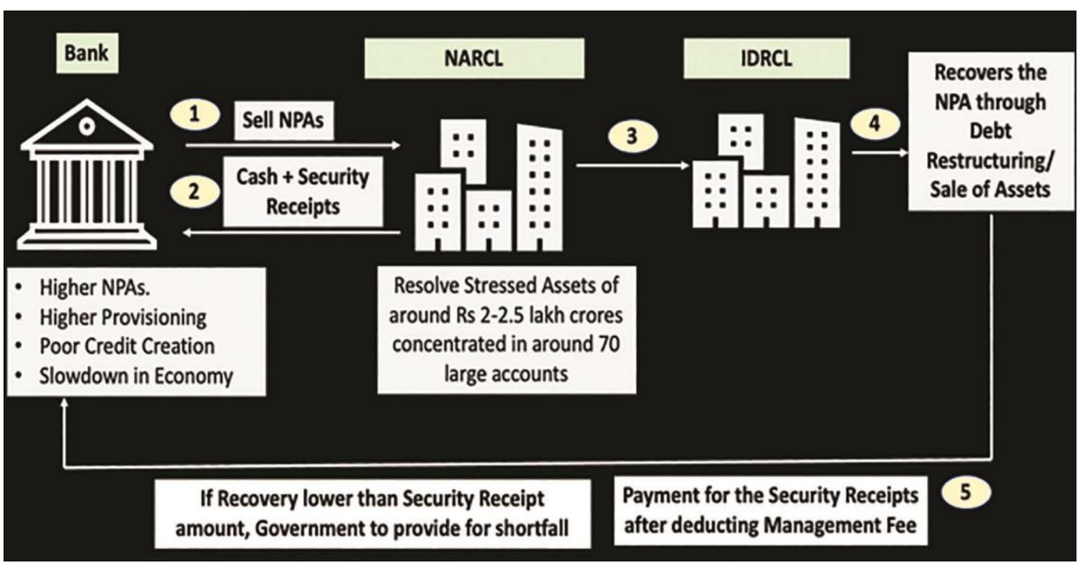
Note: The Asset Reconstruction Companies are registered with the RBI under the provisions of SARFAESI Act. The NARCL has been incorporated under the Companies Act and has applied to Reserve Bank of India for license as an Asset Reconstruction Company (ARC). Apart from NARCL, India Debt Resolution Company Ltd. (IDRCL) has been set up as Asset Management Company (AMC) to deal with NPAs.

DIFFERENCE BETWEEN ARC AND AMC

The ARC buys the Bad loans from the Banks and then transfers them to the AMC. The AMC would then carry out restructuring to recover the bad loans. The AMC would be manned by professionals who have necessary expertise in recovering the Bad loans. For example, they may have requisite capability to take over the management of the company (which has defaulted), revive the company, make it profitable and then sell it off to recover the NPAs.

In case of India, India Debt Resolution Company Ltd. (IDRCL) has been set up as AMC which will manage the asset and engage market professionals and turnaround experts.

HOW BAD LOANS WILL BE RESOLVED THROUGH ASSET RECONSTRUCTION COMPANIES?



Step 1: The ARC would buy NPAs from the Banks. The Money is paid to the Banks in the form of Cash and Security Receipts. 15% of money is paid in form of Cash and 85% in form of Security Receipts (SR). The SARFAESI Act provides for the issuance of Security Receipts.

Step 2: Decrease in NPAs on Banks' Balance Sheets--> Lower Provisioning--> Capital gets unlocked--> Increase in Credit Creation--> Economic growth.

Step 3: The ARC recovers the NPA either through Debt restructuring or sale of mortgaged assets.

Step 4: The ARC makes the payment for the security receipts after deducting its management fee.

ROLE OF THE GOVERNMENT

The Government has decided to give guarantee worth Rs 30,000 crores on the payment of security receipts by the NARCL. If the NARCL is unable to sell the bad loan, or sold it at a loss, then the government guarantee will be invoked and the difference between what the bank was supposed to get and what the NARCL was able to raise will be paid from the Rs 30,000 crore that has been provided by the government.

WHY A NEW ARC HAS BEEN PROPOSED TO BE ESTABLISHED?

Presently, there are around 10-15 ARCs, out of which only 3-4 ARCs are well capitalised to take over NPAs worth Rs 500 crores. However, the total NPAs concentrated in 70 large accounts is high as 2-2.5 lakh crores. Obviously, we could have strengthened the existing ARCs to solve this. But, the Government believes that a new ARC without any legacy issues would be well equipped to handle this.

PROS AND CONS OF BAD BANK

Bad Bank- Pros and Cons	
Arguments in Favour	**Arguments against**
Improvement in the balance Sheet of the Banks due to decrease in the NPAs.	The Bad Bank stands ready to buy NPAs from the Banks. Hence, this would discourage the Banks from exercising due caution in lending loans (Moral Hazard)
Unlocking of the capital that was earlier locked up as provisioning requirements. This would lead to increase in the credit creation.	According to Ex-RBI Governor Raghuram Rajan, the Setting up of Bad Bank would merely lead to transfer of Assets from one entity to another
Enable the Bank to focus on their core areas of accepting deposits and lending loans. The function of recovery of bad loans gets transferred to the specialist Bad Bank.	The NPAs of Banks has increased on account of number of reasons such as Political interference in working of Banks, Increase in wilful defaulters, poor recovery process etc. Hence, Bad Bank does not solve the core underlying reasons which led to increase in NPAs in the first instance. The Bad Bank is thus considered to be superficial solution to the underlying problem of NPAs.
Most of the NPAs are concentrated in the larger borrowers who have taken loans from multiple banks. Presently, such Banks come together to form Committee of Creditors (CoC) and formulate a resolution plan to recover the NPAs. However, such a mechanism is presently facing problem of coordination and delays in the recovery of NPAs. Setting up of Bad Bank would enable the multiple Banks to transfer their NPAs simultaneously to Bad Bank and improve their balance sheets	Dilemma over pricing of NPAs Higher pricing of Loans→ Loss to ARC Lower pricing of Loans→ Loss to Banks Delays in recovery of NPAs by the ARCs.

WAY FORWARD

Based upon the Global experiences in countries such as US, China, Sweden etc., we need to adopt following strategies to ensure success of NARCL:

Well-Capitalised NARCL: Successful Bad Banks across the world were well-capitalised, which in turn enabled them to take up on the NPAs. Hence, NARCL needs to be well-capitalised to take over NPAs worth Rs 2 lakh crores.

Finite Tenure: Once it is set up, bad bank should have finite tenure within which it should be able to resolve the NPAs. If it continues to exist in perpetuity, it would discourage Banks from exercising due caution in giving loans (Moral Hazard).

Realistic valuation of NPAs: Usually, Banks recover only around 10-15% of the fully provisioned loans and haircuts is as high as 85-90%. Hence, Banks should transfer NPAs to NARCL at realistic value.

Time Bound Resolution of NPAs: Delays in recovery of NPAs would lead to delay in payment of Security Receipts to the Banks and hence adversely affect their financial position.

Professional Expertise: Considering the fact that most of the private ARCs have remained unsuccessful, the NARCL and IDRCL need to have highest level of professional expertise and calibre to solve NPA mess in a time bound and efficient manner.

Reforms in PSBs: The setting up of Bad Bank without focussing on reforms in PSBs would mean that the fundamental problems that led to NPAs in first place continue to remain. Hence, recommendations of P.J. Nayak Committee on setting up of Banking Investment Committee has to be expedited.

►NABFID- DEVELOPMENT BANK IN INDIA: OPPORTUNITIES AND CHALLENGES

The Union Budget 2021-22 has proposed to set up development Bank in the form of NaBFID as **financer, enabler and catalyst** for the National Infrastructure pipeline. The NaBFID is expected to **reduce pressure on banks, lower the cost of capital and meet investment** needs of $ 5 trillion economy.

Global Examples: China (China Development Bank), UK (Green Investment Bank), Germany (KfW)

Indian Examples: NABARD (Agriculture and Rural Development), Industrial Finance Corporation of India (Industrial Development), SIDBI and MUDRA (MSME Development), EXIM Bank (Trade Development), National Housing Bank (Housing Infrastructure).

Note: IFCI was the first ever development bank that was established in 1948. Even, ICICI and IDBI Banks were initially set up as Development Banks, but were later converted into Commercial banks based upon the recommendations of Narasimhan Committee.

NATURE OF ASSISTANCE PROVIDED BY THE DEVELOPMENT BANKS

The Development Banks may offer the following kinds of assistance to the companies:

- Extend long term finance at concessional rates to the companies.
- Subscribe/buy the shares of the companies which are involved in financing of infrastructure, industrial or housing projects
- Partial Credit Guarantee on the repayment of the bonds issued by the companies.

HOW THE SETTING UP OF NABFID WOULD BENEFIT INDIAN ECONOMY?

Meet Investment Needs to realise $ 5 trillion by the end of 2024-25.

Reduce Pressure on Commercial Banks: The Banks have mainly relied on short-term deposits for lending to long term infrastructural projects leading to Asset-Liability Mismatch and higher NPAs.

Lower Cost of Capital: The credit enhancement provided by the development Banks would enable the companies to raise loans at lower rates of interest leading to decrease in the cost of capital.

Reduce Foreign Currency Exposures: Presently, some of the Infrastructural and housing finance companies borrow loans from overseas market. The depreciation in the value of Rupee may put additional burden on them and exposure them to fluctuations in the exchange rate.

STRATEGIES NEEDED TO ENSURE SUCCESS OF NaBFID

India's experience with the Development Banks has so far been a mixed bag. On one hand, some of the development banks were embroiled in controversies (National Housing Bank was involved in Harshad Mehta Scam). While on the other hand, some of the development banks such as the one established by Karnataka Government provided necessary funding to Infosys company during its initial days, which in turn enabled Infosys to become a global giant. Hence, India has to learn from its past experiences in order to ensure the success of NaBFID.

Independence and Autonomy: Ensure professionalism, autonomy and effective control and audit mechanism. Otherwise, NaBFID's performance would be lacklustre and similar to that of Public Sector Banks.

Enhance Access to Long-term Capital: The Budget 2021-22 has allocated only around Rs 20,000 crores, which is too little for our mammoth infrastructure needs. Enhanced financing can be provided by:

1. Long-term credit from RBI to NaBFID through Long-term Repo Operations (LTROs).
2. Declaration of Bonds issued by NaBFID as eligible securities for meeting SLR requirements of the Banks.

(Encourage the Banks to buy Bonds issued by NaBFID → Enable NaBFID to raise money from Banks)

3. Enable NaBFID to borrow money from International Institutions such as World Bank, ADB etc.

Infuse Competition: Monopoly by NaBFID in infrastructure financing may lead to operational inefficiencies; need to encourage private sector to establish Development Banks so as to infuse competition.

Enhancing Investor base: Make it easier for the pension fund companies, Insurance companies, mutual fund companies to invest in bonds issued by NaBFID; Tax incentives to the individuals upon investing in bonds issued by NaBFID etc.

Hence, the setting of NaBFID is indeed a welcome move. However, in order to enable it to become a game changer, we must learn from our past mistakes and create conducive ecosystem to ensure its success.

►DIRECT MONETIZATION OF GOVERNMENT'S DEFICIT

The Direct Monetisation of Government's deficit refers to direct borrowing by the Government from the RBI through the issuance of G-Secs. It is undertaken during exceptional circumstances which require higher Government Expenditure to deal with adverse economic conditions. Some of the economists have been arguing for Direct Monetisation in response to GDP Contraction due to COVID-19. They have been arguing that Direct Monetisation would enable the Government to provide <u>higher fiscal stimulus leading to enhanced Investment expenditure on productive assets, increased Job creation and economic revival.</u> The Government need not be worried about higher Fiscal Deficit and Public Debt since RBI can print currency notes to repay debt.

RESTRICTION ON DIRECT MONETIZATION OF GOVERNMENT'S DEFICIT UNDER FRBM ACT

1. The Government can borrow money from RBI for meeting its immediate and temporary cash requirements through the Ways and Means Advances (WMA).
2. The Government cannot borrow money from RBI for meeting its deficit. It can do so only under exceptional circumstances.
3. Exceptional circumstances under which Government can borrow money from RBI for meeting its deficit include- National security, Act of war, National calamity, collapse of agriculture, Structural reforms, decline in real output growth of a quarter by at least three per cent. points below its average of the previous four quarters.

ARGUMENTS AGAINST DIRECT MONETIZATION-CONVENTIONAL MACRO-ECONOMICS

The higher borrowings can have an adverse impact on the economy in the following manner:

- Higher Borrowings → Increase in Fiscal Deficit and Public Debt--> Inability of Government to repay the higher Debt
- Higher borrowings → Increase in the Money Supply → Higher Demand → Higher Inflation
- Higher Borrowings of Government from Banks → Less money available for private sector to borrow from Banks → Increase in the interest rates → Crowding out Effect
- Increase in rate of Inflation → Central Bank increases the policy rates → Increase in rate of interest on loans → Decline in Investment expenditure → Slowdown in GDP and Increase in Unemployment.
- Higher Inflation and Slowdown in GDP → Downgrade in Credit Ratings → Outflow of FPIs → Rupee Depreciation→ Depletion of Forex Reserves.

Hence, we need to realise that Direct Monetisation is a <u>double-edged sword</u>. Higher borrowings can have adverse impact in form of- **<u>Higher fiscal deficit and Public debt, Higher Inflation and consequently macro-economic instability</u>**. Further, it is not the right time to undertake Deficit Financing on account of following reasons:

<u>Excess Liquidity in Economy:</u> The Banks are sitting on surplus liquidity of around Rs 8 lakh crores. However, they are reluctant to lend due to fear of NPAs. That is why, a major chunk of the Government's support under the Atma Nirbhar Bharat Package is in form of Credit Guarantee on the loans.

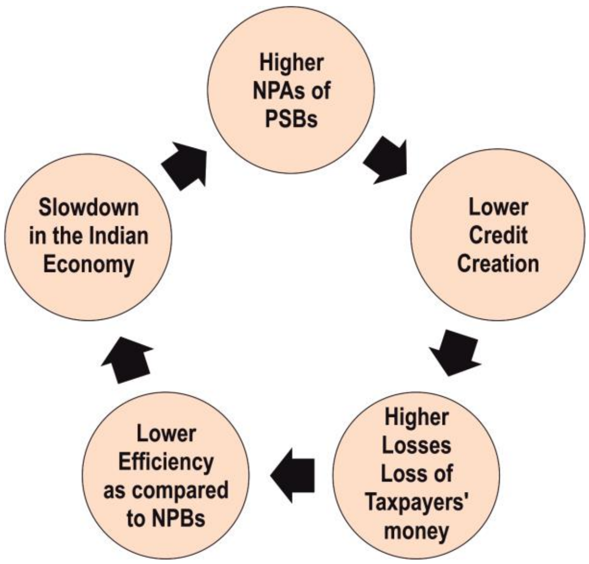
<u>Poor Monetary Policy Transmission</u>: The Interest rates on the loans have not reduced in spite of reduction in policy rates.

The present Economic slowdown is undoubtedly unprecedented and thus the Government may have to use **<u>unprecedented tools such as Direct Monetization</u>**. But, considering the risks involved, **<u>it should be used at the right time and as a last resort</u>** when all other options are tried and tested.

►PRIVATIZATION OF PUBLIC SECTOR BANKS (PSBS)- PROS AND CONS

Presently, based on media reports, there is a speculation that the Government is likely to designate banking as a strategic sector. This will allow the government to own a maximum of four public sector banks (PSBs), and thus, some PSBs which have not been included in the already completed consolidation process would either be privatised or merged into larger PSBs.

PRESENT STATUS OF PUBLIC SECTOR BANKS (PSBS) IN INDIA



As of March 2019, PSBs had Rs 80 lakh crore in deposits and gave loans of Rs 58 lakh crore, accounting for almost 70% of the market share in the Banking sector. However, the performance of the Public Sector Banks has been quite poor as compared to new private Banks (NPBs).

1. PSBs account for **80% of the overall NPA**s of the Banking sector.
2. **Slower Credit Growth** of hardly around 4% in comparison to 15-30% registered by New private Banks (NPBs)
3. **Higher Losses** of around Rs 66,000 crores. This is almost equal to the budgetary allocation for the Primary Education in India.
4. **Higher Banking Frauds** accounting for 93% of total frauds.
5. **Loss of Taxpayers' money**: According to the Economic Survey 2019-20, every rupee of the taxpayers' money which is invested in PSBs fetches a market value of 71 paise. On the other hand, every rupee invested in NPBs fetches a market value of Rs 3.70 i.e., more than five times as much value as that of a rupee invested in PSBs. This shows that the taxpayers' money is inefficiently deployed in the Public sector Banks which in turn is leading to loss of both the Government as well as the taxpayers.
6. **Lower Efficiency** in the form of lower Return on Assets, Return on equity and indicators like capital adequacy ratio.

CHALLENGES OF PSBs

1. PSBs enjoy less strategic and operating freedom because of majority government ownership.
2. Government exercises significant control over all aspects of PSBs operations ranging from policies on recruitment and pay to investments and financing and bank governance including board and top management appointments.
3. Implicit promise of bailout of bank liabilities which is an implicit cost to the taxpayer.
4. PSB officers are subjected to extra scrutiny by the Central Vigilance Commission and CAG. Officers are wary of taking risks in lending or in renegotiating bad debt, due to fears of harassment under the veil of vigilance investigations.
5. High operating costs
6. Recruitment processes of PSBs hinder them from campus hiring.

CASE FOR PRIVATISATION OF EXISTING PUBLIC SECTOR BANKS (PSBs)

Improve the overall efficiency of banking Sector: Even though, the PSBs and NPBs are operating in the same domestic market, the PSBs are considered to be less efficient and thus leading to loss of taxpayers' money.

Increased Competition leading to development of large-sized banks: India's banking sector is disproportionately under-developed given the size of its economy.

Government's Monopoly: The Government ownership in the PSBs, which account for almost 70% of the Banking assets has led to a kind of virtual monopoly which is reducing the competition, breeds inefficiency and thus hurts the overall growth of the Banking Sector.

Previous Experience: The Strategic disinvestment has led to increase in overall efficiency gains which later translated into higher returns for the shareholders.

Possibility of Leveraging MFIs and NPBs for Social causes such as DBT, MGNREGA Wages, Pradhan Mantri Jan Dhan Yojana etc.

Reduce the Burden on the Government by doing away with the need for undertaking their recapitalisation to comply with the higher BASEL III requirements.

No benefit due to Nationalisation of Banks as shown below:

Arguments in Favour	Arguments against
Allocations of banking resources to rural areas, agriculture, and priority sectors and hence responsible for poverty alleviation between 1969-1991.	Poverty alleviation not entirely due to Nationalisation of Banks; other factors such as Green Revolution, launch of poverty alleviation programmes such as IRDP contributed to Poverty alleviation.
Ten-fold Increase in the number of Rural Banks between 1969-1980	Proactive policies by the RBI to improve Financial Inclusion: Priority Lending, RBI's 4:1 formula where a bank was required to open 4 rural branches to obtain a license to open an urban branch between years 1977 and 1991 etc.
Four-fold increase in Agricultural credit post Nationalisation	Despite nationalization a significant portion of the poor remained unbanked till 2014. Financial inclusion received the necessary impetus in 2014 through the Pradhan Mantri Jan Dhan Yojana (PMJDY). This improvement was on account of active involvement of both PSBs and NPBs.

ARGUMENTS AGAINST PRIVATISATION OF PSBs

Improve the Governance framework of PSBs: The main reason for the lower efficiency of the PSBs is actually the Government's political intervention in the functioning of the PSBs, which is in turn leading to lack of autonomy and freedom to the PSBs and thus hurting their revenues. ***So, according to the experts, the solution to improve the efficiency of the PSBs is not privatisation, rather a complete overhaul of the Governance framework***. Some of the external constraints faced by the PSBs which is leading to their poor efficiency include:

1. **Dual regulation by the Finance Ministry and RBI**: The Finance Ministry's directives could be both explicit (through the issue of guidelines) and through undocumented suasion. However, the Private sector banks are free from dual regulation.
2. **Board constitution:** The appointment to the Boards of the Banks are mainly based on Political considerations without giving due-emphasis on merit. Average tenures of Chairmen and Executive Directors are short, all of which lead to the weak empowerment of boards.
3. **External vigilance enforcement** through the CVC and CBI inhibits the PSBs from taking commercial risks which are otherwise deemed acceptable. Further, there is higher focus on adherence to procedures and rules rather than outcomes leading to red-tapism and slow decision making.

Privatisation may not solve the Problems: We have to realise that even all the new private banks (NPBs) are not efficient. The balance sheets of the existing NPBs is as poor as the PSBs. The case in the point is the recent Yes Bank Crisis. Similarly, number of Banking frauds of much higher value have come to light even in the NPBs as well. So, it is not the ownership structure that determines the efficiency levels of the Banks. Rather, it is the quality of Governance framework and effective regulation which is a key to promote efficiency of the PSBs.

Accordingly, the Government has to implement the recommendations of the P.J. Nayak Committee to improve the Governance of the PSBs. One of the most important recommendations given by this committee was related to the setting up of Banking Investment Company (BIC). The committee had recommended the Government to set up BIC as a holding company and transfer all its shares in the PSBs to BIC. The BIC would then exercise its control over the PSBs and also make appointments of the Board of Directors leading to lack of political interference in the working of PSBs.

►MERGER OF BANKS- IS IT A PANACEA FOR THE PRESENT PROBLEMS?

NEED FOR CONSOLIDATION OF PSBs

Fragmented Banking Structure in India: Indian banking sector is highly fragmented, especially in comparison with other key economies. Additionally, most of the PSBs in India are competing within themselves; most of them have same business models and compete in the same segments as well as same geographies. Thus, there is a huge scope of consolidation in this sector.

Build capacity to meet credit demand: India needs to have global sized banks that can support the investment needs of economy and sustain economic growth. The Consolidation of Public Sector Banks into 4 or 5 banks would create larger banks with capacity to fund larger size projects of economic importance.

Need for larger capital base to manage NPAs: The Public Sector Banks (PSBs) which form approximately 72% of the Indian banking system are among the most affected by the high non-performing asset (NPA) problem. The consolidation of PSBs would lead to a larger capital base to manage the NPAs.

Merger of weak Bank with the strong bank would prevent failure of weak Banks

Benefits for the Government: Reduce the financial burden on the Government on undertaking frequent recapitalization of the Public Sector Banks. It would also help the Government in meeting the stringent capital requirements stipulated under the BASEL III Norms.

Significant cost benefits from synergies: Larger distribution network of the amalgamated bank will reduce operating and distribution costs with benefits for its customers and their subsidiaries.

RISKS AND CHALLENGES OF BANK MERGERS

Systemic Risk: The 2008 crisis highlighted that presence of large financial institutions pose systemic risk to the economy and such institutions are "too big to fail". Further, in event of any such crisis in future, the onus would lie on the government to bail out the institutions, thus posing a moral hazard.

Human Resource Integration: Many employees would fear job loss and disparities in the form of regional allegiances, benefits, reduced promotional avenues, new culture, etc.

Affect Financial Inclusion: Consolidation may lead to shutting down of overlapping branches of the entities being merged.

Technological challenges: Various banks are currently operating on different technology platforms.

Adverse Impact on Big banks: Forced mergers of the weaker Bank with stronger banks would adversely affect the operations of the strong banks.

Customer Retention: SBI's recent merger with its associate banks saw customers of associate banks opting to move their business to rival lenders.

Low Positive Correlation between Size and Efficiency: The merger of PSBs is undertaken on an assumption that a large sized bank would be more efficient than a small sized bank.In case of India, some of the small sized banks are considered to be much more efficient than the large sized Public Sector Bank.

►FINANCIAL FRAGILITY IN THE NBFC SECTOR

Shadow banking comprises a set of activities, markets, contracts and institutions that operate partially or fully outside the traditional commercial banking sector and are either lightly or not regulated at all. Shadow banking sector has grown significantly in India and accounts for a significant proportion of financial intermediation especially in those segments where traditional banking sector is unable to penetrate. Three important segments of shadow banking system in India:

1. Non-Banking Housing Finance Companies (HFCs)
2. Retail Non-Banking Financial Companies (Retail-NBFCs)
3. Liquid Debt Mutual Funds (LDMFs)

The NBFC sector in India has been roiled by a series of defaults by the Infrastructure Leasing & Financial Services (IL&FS) group of companies. The NBFC's crisis has also been called as India's "Lehman Moment" since it could have had "contagion impact" on the entire Indian Economy due to the exposure of IL&FS to various banks and financial Institutions.

WHAT IS THE PROBLEM WITH THE NBFC SECTOR?

A large number of NBFCs have defaulted in payment obligations of bank loans, commercial paper and inter corporate deposits. Consequent to defaults, credit rating agencies have downgraded the ratings of the financial instruments issued by the NBFCs. A large number of banks and Mutual Fund companies have lent their money to the NBFCs and hence the default on the repayment of loans would have adverse impact on the entire financial sector leading to "Contagion impact".

WHAT ARE THE REASONS FOR THE NBFC CRISIS?

Asset-Liability Mismatch: The NBFCs such as IL&FS depend on short term loans (through issuance of Commercial Paper) to lend money for infrastructure projects. The gestation period of such infrastructure projects is around 10-15 years. This leads to Asset – Liability Mismatch.

Roll over Risk: The ALM in NBFC sector leads to redemption pressure on the mutual funds. Faced with redemption pressures, the LDMF sector is reluctant to roll over loans to the NBFC sector (Rollover Risk), causing a liquidity crunch in the NBFC sector.

Increase in the rates of Interest: The short-term interest rate of the commercial papers has increased sharply in the recent times leading to increase in the cost of borrowing for the NBFCs.

Complex Structure: Most of the NBFCs have complex business structure spanning multiple sectors which makes it extremely difficult to audit their accounts and regulate them efficiently. For example, IL&FS has 27 direct subsidiaries and 159 indirect subsidiaries.

Delays and Cost over runs in Infrastructure projects: The Infrastructure projects in India face various constraints such as delay in land acquisition, environmental clearances, cost escalation etc. This is has in turn adversely affected IL&FS as well.

Vicious Circle: The Banks have been reluctant to lend loans to the NBFCs after the default by the bigger NBFCs such as IL&FS. On similar lines, there has been drastic fall in the demand of the bonds and commercial papers of the NBFCs among the financial entities. Earlier the NBFCs were able to **roll-over their debt** (take loans to repay back previous loans). However, this vicious cycle has made it difficult for the NBFCs to fulfil their debt obligations.

Lack of Integrated Regulation: Presently, the NBFC Sector is regulated by multiple regulators such as RBI, IRDA, SEBI etc due to which the it makes it difficult for a single regulator (such as RBI) to have the complete picture of the finances of the NBFCs.

HOW THE NBFC CRISIS WOULD AFFECT THE ECONOMY?

Banking Sector: Increase in NPAs→ Higher Provisioning→ Decrease in Credit Creation→ Economic slowdown.

Infrastructure Financing: Further, NBFCs such as IL&FS have provided finance for major infrastructure projects such as Chenani-Nashri Tunnel. Thus, going forward, the NBFC crisis would have adverse impact on infrastructure financing in India.

Loans to the MSMEs: Affect the credit creation and hence the associated investment expenditure and employment creation.

Equity Market: Sell-off of the shares of the NBFCs leading to rapid fall in the share prices of the NBFCs such as IL&FS, DHFL etc.

Debt market: Default by the NBFCs makes it difficult for other companies from raising money from the debt market.

Mutual Fund Companies: face redemption pressure and find it difficult pay back the investors' money.

Credibility of Credit Rating Agencies takes a hit

HOW TO PREVENT SUCH CRISIS IN FUTURE?

Integrated Monitoring of NBFCs: The present crisis would have not arisen had we put in place institutions that monitor and regulate systemic risks such as a systemic-risk regulator. In this context, the Financial Sector Legislative Reform Commission (2012) had recommended to create Financial Data and Management Centre to collect data across the sectors and monitor systemic risk.

Strengthening Credit Ratings: The Credit rating agencies must take into account financial position of the NBFCs before rating their financial instruments. Further, they must also provide the rationale for their credit ratings.

Addressing Asset- Liability Mismatch (ALM): The NBFCs need to maintain sufficient amount of liquidity to avoid ALM. In this regard, the recent RBI's guidelines on extending Liquidity Coverage Ratio (LCR) to NBFCs is a step in the right direction.

Reducing over-exposure to NBFCs: There is a need to ensure that the Banks and Mutual Fund companies are not over-exposed to the NBFCs in term of their loan portfolios.

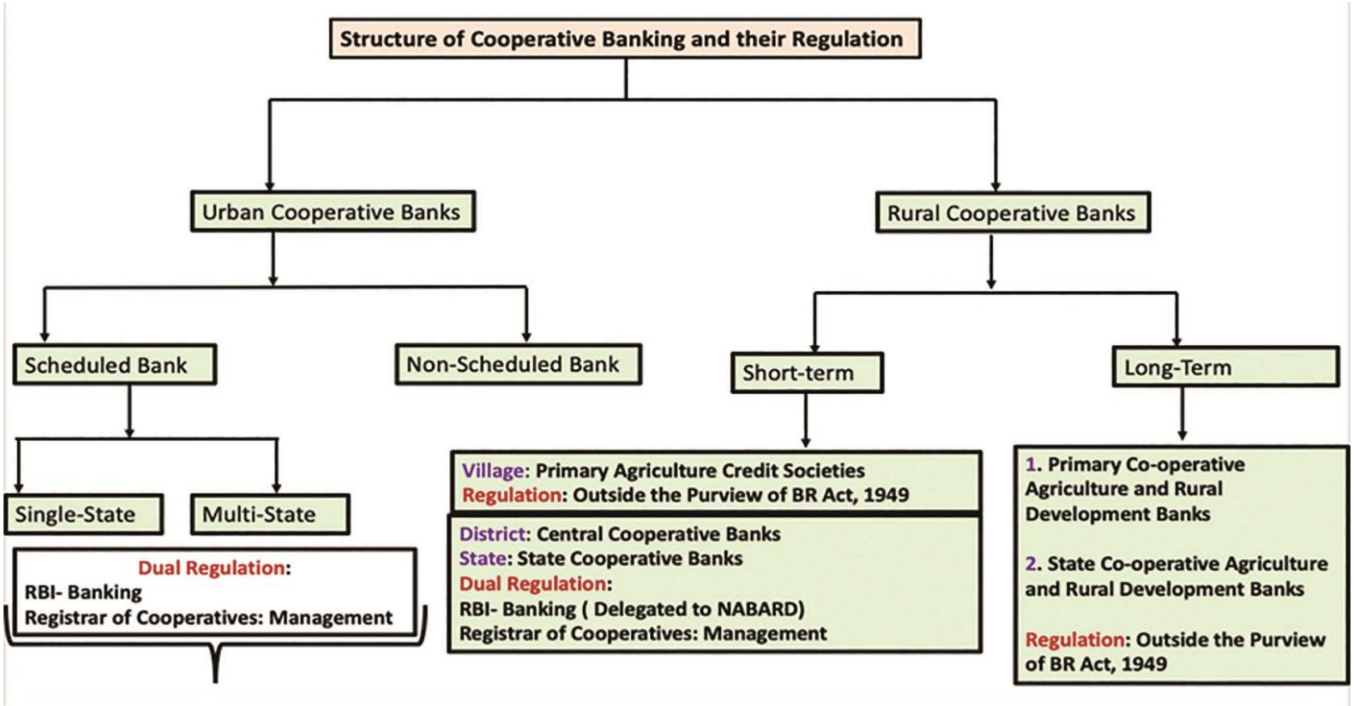
2019-20 ECONOMIC SURVEY'S RECOMMENDATIONS

- Regulators can employ Health Score methodology (something similar to Prompt Corrective Action used for Banks) to detect early warning signals of impending rollover risk problems in individual NBFCs. Downtrends in the Health Score can be used to trigger greater monitoring of an NBFC.
- When faced with a dire liquidity crunch situation, regulators can use Health Score as a basis for optimally directing capital infusions to deserving NBFCs to ensure efficient allocation to scarce capital.
- Prudential thresholds can be set on the extent of wholesale funding that can be permitted for firms in the shadow banking system.

►REGULATION OF COOPERATIVE BANKS

Recently, the PMC Bank Crisis has exposed the poor regulation of the Urban Cooperative Banks (UCBs). According to some of the estimates, In the last 5 years, the Urban cooperative banks have reported nearly 1000 cases of fraud worth more than Rs 220 crores. This failure of the UCBs is attributed to their dual regulation by the RBI and Registrar of Cooperative Societies.

Hence, in order to address this problem, Parliament has recently passed the Banking Regulation (Amendment) Bill 2020.



PRESENT PROBLEMS WITH THE REGULATION OF URBAN COOPERATIVE BANKS

Dual Regulation: Urban cooperative Banks are under the dual regulation of RBI and Registrar of Cooperative societies. Such form of dual regulation leads to lack of coordination between the regulating entities. This enables the cooperative Banks to escape from greater scrutiny leading to financial irregularities and lapses. This can be understood by looking at the PMC Bank which was consistently under-reporting its NPAs, but both the regulators failed to see the problem.

Poor regulation by Registrar of Cooperative Societies: Some of the core functions such as audit of the accounts and supersession of Board of Directors are required to be performed by the Registrar of Cooperative Societies. However, some of the UCBs are controlled by the local level influential political leaders and businessmen. Hence, due to strong political pressure, the Registrar of Cooperative societies have failed to perform their role efficiently.

Lack of Empowerment of RBI: The RBI has been adequately empowered to regulate the Banking related functions of the Scheduled Banks. The RBI has been empowered to set minimum level of qualifications for the Board of Directors. The RBI can supersede the Board of Directors of the scheduled Banks. The auditing of such Banks is carried out in accordance with the best practices laid down by the RBI. However, such powers are not entrusted with the RBI with respect to the regulation of UCBs leading to laxity.

SALIENT FEATURES OF BANKING REGULATION (AMENDMENT)ACT 2020

The act does not put an complete end to the dual regulation of the Urban Cooperative Banks. The act does not completely take the powers of the State Registrar of Cooperative Societies/ Central Registrar of Cooperative Societies. However, their powers have been substantially curtailed and the regulatory powers of the RBI has been substantially enhanced.

For example, the audit of such Banks will take place according to the best practices laid down by the RBI. The RBI would be empowered to supersede the Board of Directors. The RBI would also be empowered to lay down the minimum level of qualifications for the Board of Members. Hence, the overall idea behind the Ordinance is to strengthen the regulatory oversight of the RBI.

►CENTRAL BANK DIGITAL CURRENCY

CBDC is a digital currency backed by the Central bank of a country and hence considered as legal tender. It is considered as "programmable money" since it could be used only for selected transactions or in specific regions. It can be either used for transactions by people (Retail CBDC) or for settling transactions among financial Institutions such as Banks (Wholesale CBDC).

The Subhash Chandra Garg Committee (2019) has recommended a ban on private cryptocurrencies on account of concerns such as volatility, instability, security risk and risk of funding illegal activities. However, the committee has highlighted that an official digital currency can have number of advantages such as

- Promote cashless society.
- Increase in Financial Inclusion
- Foster development of Fintech sector
- Provide a real time picture of economic activity and hence better GDP estimates and efficient monetary policy formulation.
- Traceability of transactions would crack down on corruption and money laundering.
- Counter the monopoly of private sector issued cryptocurrencies.

The draft National Blockchain strategy has also advocated in favour of CBDC. Hence, a committee needs to be set up to examine its feasibility.

►CHALLENGES ASSOCIATED WITH INFLATION TARGETING

One of the most critical functions of the RBI is the Inflation Targeting as provided under the Monetary Policy Framework Agreement signed between the RBI and Government in 2015. Some of the critics have pointed out that the Inflation Targeting has certain fundamental flaws which can hinder the economic growth and development in an economy. In this regard, let us understand about various aspects of Inflation Targeting such as Rationale, Problems and Challenges and Way Forward.

WHAT IS INFLATION TARGETING?

Inflation Targeting is monetary policy framework wherein the Central Bank of a country focuses only on maintaining the rate of Inflation within a targeted range. In case of India, the Inflation targeting was introduced through the Monetary Policy Framework Agreement signed between the RBI and Government in 2015. As per terms of the agreement, RBI's primary objective would be to maintain price stability, while keeping in mind the objective of growth. The RBI is required to maintain rate of inflation of 4% with a deviation of 2% i.e. inflation has to be maintained between 2% to 6%.

BENEFITS OF INFLATION TARGETING

Enhanced Transparency: Explicitly mandated Inflation targets brings in more amount of clarity and predictability with respect to the rate of Inflation and monetary policy formulation.

Promote Growth: A high rate of inflation leads to decrease in the purchasing power of currency, reduces the savings and investment rate, increases the unemployment and leads to overall decrease in the GDP growth rate. Further, high rate of inflation is accompanied by higher levels of Fiscal Deficit and Current Account Deficit leading to an adverse impact on the macro-economic stability of the country. Hence, low and moderate level of inflation would incentivise the investors to undertake the investment in the economy leading to the promotion of higher growth and development.

Autonomy and Accountability of RBI: As per the monetary policy framework agreement, the RBI has been given complete autonomy in maintaining the rate of inflation within the mandated targets. If the RBI fails to maintain the Inflation within the target, then it would be required to submit in writing, the reasons for its failure.

Empirical Evidence: The Inflation targeting has been quite successful in some of the advanced economies such as UK, New Zealand etc. These advanced economies have been able to maintain moderate rate of inflation for a much longer time leading to increased macro-economic stability.

PROBLEMS AND CHALLENGES WITH INFLATION TARGETING

Disregards the Multi-faceted role of RBI: In a developing country like India, it is not practical for the central bank to focus exclusively on inflation without taking into account the larger development context. The RBI needs to balance between growth, price stability and financial stability.

No Clear link between Price Stability and Financial Stability: Prior to 2008 Global Financial Crisis, advanced economies were able to maintain moderate rate of inflation for a long term mainly due to adoption of Inflation Targeting. However, the 2008 Global Financial Crisis has clearly proved that price stability alone cannot lead to financial stability and the excessive focus of the Central banks on the price stability may lead to neglect of other crucial functions such as regulation leading to the economic crisis.

Empirical Evidence against Inflation Targeting in India: The RBI has been able to maintain stable rate of Inflation within the mandated range since last 2-3 years. However, inspite of stable rate of Inflation, Indian economy is facing challenges on multiple fronts.

Poor Monetary Policy Transmission: The Inflation targeting is more suited to the developed economies since the monetary policy transmission in such economies is quite efficient. However, in case of India, the monetary policy transmission is quite inefficient and this can in turn reduce the effectiveness of Inflation Targeting.

Hinder GDP Growth: In order to contain Inflation, the RBI would be required to increase the rate of Interest by following the contractionary monetary policy. However, such a policy would lead to increase in the rate of interest on the loans leading to decrease in investment and consumption expenditure leading to decline in the GDP growth rates.

Does not address the Supply Side Inflation: The Government of India would be required to address the supply side disruptions in order to moderate the prices of such commodities.

WAY FORWARD

Post-Global Financial crisis, the dominant view around the world is that flexible inflation targeting, rather than pure inflation targeting is more efficient for monetary policy formulation. According to the Flexible inflation targeting, the role of the Central Bank would depend on the prevailing rate of inflation in the country. If the rate of inflation is way off target, the primary emphasis of the central Bank would be bring the rate of inflation within an acceptable range.

On the other hand, if the rate of inflation is within the range, the central Bank should focus on its other core objectives. Thus, it is being said that the Central banks should focus on flexible inflation targeting rather than pure inflation targeting. In this aspect, there is a need for greater debate around kind of Inflation targeting in India.

►DEVELOPING CORPORATE BOND MARKET IN INDIA

Corporate bonds are debt securities issued by private and public corporations. Companies issue corporate bonds to raise money for a variety of purposes, such as building a new plant, purchasing equipment, or growing the business.

NEED FOR DEVELOPING CORPORATE BOND MARKET IN INDIA

Meet Investment needs: The Economic Survey 2018-19 has highlighted that India needs to shift gears from consumption-driven economy to investment-led economy wherein the private sector investment has to become the key driver of Indian Economy. The development of corporate bond market can significantly enhance the investment rates and enable India to become $5 trillion economy by end of 2024-25.

Reduce pressure on the Government and Banks: In most international markets such as USA, the corporate bond market is well developed and this enables companies to raise funds across different maturities including for infrastructure projects with long gestation periods. In India, given the absence of a well-functioning corporate bond market, the burden of financing infrastructure projects such as roads, ports, and airports is more on banks and the government.

Asset-Liability Mismatch in financial sector: The Banks use short term deposits (3-5 years maturity period) to fund long term infrastructure projects with long gestation period leading to asset-liability mismatch. Thus, an active corporate bond market helps in the diversification of risks in the financial system.

Lower cost of capital: Corporate bond markets can help borrowers reduce their financing costs in two ways. First, they enable the corporates to borrow money directly from the investors and facilitate bank disintermediation, thus removing the "middleman" and related costs. Second, by issuing corporate bonds, firms may tailor their asset and liability profiles to reduce the risk of maturity and currency mismatch on their balance sheet, thus reducing the overall cost of capital.

Reduce Foreign currency exposures: The corporate bond market enables the firms to borrow for longer maturity periods in local currency to meet their investment needs and avoid foreign currency exposures.

Provide long term financial assets: An active corporate bond market could also provide institutional investors such as insurance companies and provident and pension funds with quality long term financial assets, helping them in matching their assets and liabilities.

Present Status of Corporate Bond Market in India:

Corporate debt to GDP ratio in India stood at around 17 per cent in 2017 as compared to 123 per cent in the US and 19 per cent in the case of China. The proportion of firms using banks as the primary source of working capital is higher than most developing countries. Further, much of the corporate bond sales in India occur through the private placement route, with the share of such issues in the total standing at around 95 per cent in recent years.

REASONS FOR THE UNDERDEVELOPED BOND MARKET IN INDIA

Narrow Investor Base: The demand for corporate bond as an investment is mostly confined to institutional investors with retail investors accounting for only 3 per cent of the outstanding issuances.

Dominance of Government securities: The Central and State Government securities constituted almost half of the total investment in Bond Market.

Constraints on Foreign Investors: In recent years the investment limit for FPIs in the corporate bond has been enhanced along with a reduction in the withholding tax. However, the FPIs are not fully utilizing the enhanced limits due to limited liquidity in the market.

Higher rated Companies dominate Corporate issuance: In Indian corporate bond markets almost 70% of the bonds outstanding by value are rated AAA. This indicates that the number of sub investment grade issues is minimal and the proportion below AAA is small.

Private Placement issues: In India, over 95% of issuances are through private placements. Small and medium corporate issuers generally raise resources through the private placement route given the cost considerations, ease of issuance, greater institutional demand and less retail interest.

Absence of Longer maturity Bonds: The Corporate Bond market is basically dominated by the bonds with average maturity period of 2-5 years. The Corporate bond market has not been able to cater to the needs of the long term investors such as pension and insurance fund companies through the issuance of long term maturity bonds.

Lack of Risk management market: One of the main reasons for Indian corporate bond market to have failed to pick up is absence of interest rate/ credit derivatives which can efficiently transfer the risks arising out of interest rate movements and default probabilities.

Taxation Structure: Stamp duties on corporate bonds across various states have not been standardised.

WHAT NEEDS TO BE DONE?

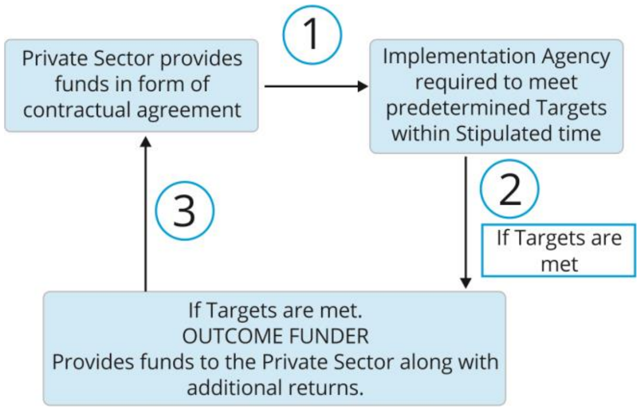
There has been a number of reports by expert Committees on development of corporate bond markets in India such as R. H. Patil Committee(2005), High Powered Expert Committee on Making Mumbai an International Financial Centre in 2007 (Percy Mistry Committee), H.R Khan Committee on Corporate Bond Market. Important Recommendations:

- **Enhancing Issuer Base:** In order to incentivise corporates to raise a part of their requirements through bonds, the time and cost for public issuance and the disclosure and listing requirements should be reduced and made simpler.
- **Enhancing Investor Base**:
    - The scope of investment by provident/pension/ gratuity funds and insurance companies in corporate bonds should be enhanced
    - Retail investors should be encouraged to participate in the market through stock exchanges. Such investors should also be encouraged to participate in the corporate bond market through mutual fund.
    - investment in corporate bonds should be considered as part of total bank credit while computing credit deposit ratio by banks
- **Bonds Primary Issuance Database:** a centralized database of all bonds issued by corporates; made available free of cost to all the investors.
- **Acceptance of corporate bonds under LAF repo of RBI**: Encourage Banks to invest in Corporate Bonds and then use them to borrow loans from RBI through Repos.
- **Debt Market Index:** Though equity indices such as Nifty 50 and the BSE Sensex serve as popular benchmarks for equities, designing debt indices has posed challenges in India as the market lacks breadth and depth.
- **Credit enhancements of bonds** by setting up of Credit Guarantee Enhancement corporation.
- Strengthening of **Credit Default Swaps (CDS):** A credit default swap (CDS) is a financial swap agreement that the seller of the CDS will compensate the buyer in the event of a debt default (by the debtor)
- **Municipal Bond Market:** Municipal bonds may be given some fiscal support in the form of bond insurance or providing credit enhancement so that municipalities are encouraged to issue such bonds.

►IMPACT BONDS

The Impact Bonds are a form of contractual agreement between Investors and implementation agency wherein the investors pay money to implementation agency only if it is able to achieve the pre-determined empirically verifiable social indicators.

The mechanism of Impact Bonds is as shown below:



Some of the examples of Impact Bonds include USAID's Utkrisht Bond, World Bank's Women's Livelihood Bonds etc. The Impact bonds have become innovative method of financing social projects related to Education, Health etc. on account of following reasons:

Focus on Outcomes: Greater emphasis on the achieving targets rather than on Inputs

Innovative design: In case of failure, the onus falls on the private investors. Hence, it has an in-built accountability mechanism which leads to development of innovative strategies.

Incentivizes Collaboration between the Government, Private Sector and NGOs brings the strength of each of these entities onto a single platform leading to synergistic efforts.

The Government expenditure of 7.5% of GDP on social sector can be optimally harnessed through impact Bonds and hence there is a need to have legal and administrative structure for their development.

►DEVELOPMENT OF GREEN BONDS IN INDIA

The Green Bonds are similar to Corporate Bonds. However, the proceeds of such Bonds are exclusively used for financing green projects such as renewable energy projects, projects to mitigate the impact of climate change, reducing the emission of fossil fuels etc. The first Green Bond was issued in 2007 when European Investment Bank raised €600 million under the label "Climate Awareness Bond" dedicated for renewable energy projects and energy-efficient projects.

GREEN BONDS IN INDIA

In January 2016, the Securities and Exchange Board of India published its official green bonds requirements for Indian issuers making India the second country (after China) to provide national level guidelines. The Indian Railway Finance Corporation Ltd (IRFC) has established a Green Bond Framework for fund raising.

CHALLENGES AND CONCERNS

In the last nearly seven years, green bonds worth $500 bn have been issued. Of this, India's contribution is hardly around $8.6 billion (1.7 per cent).

Lack of Awareness: Due to the newness of the instrument, the average domestic investor is wary of investing in Green Bonds and perceives them as high risk investments.

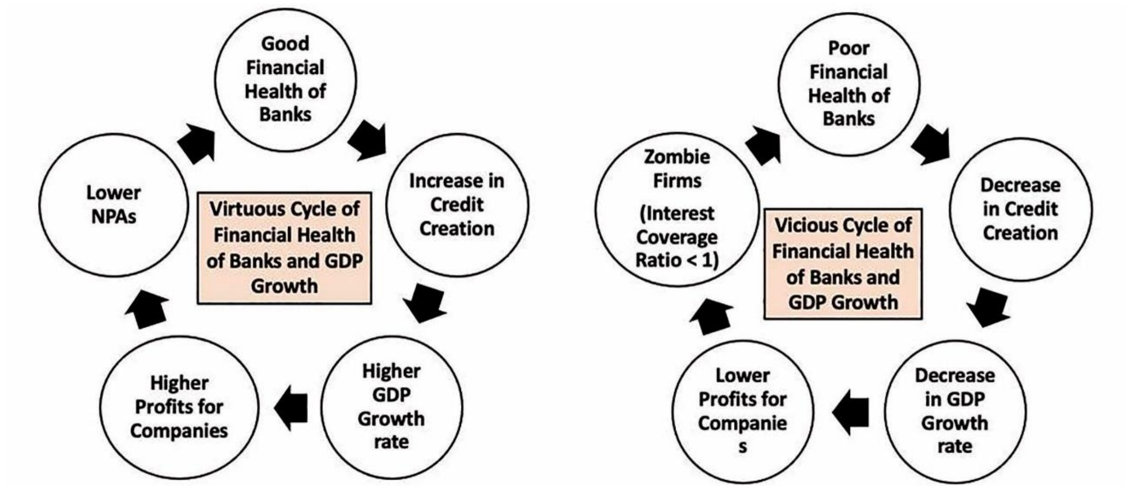
Lack of Sector Diversification: Presently, most of the proceeds of the Green Bonds are used for development of renewable energy projects. The Green Bonds need to be used for diversified purposes such as forestry and marine conservation to strengthen the Green Bond Market.

Smaller projects: Most of the time, the Green Bonds are issued for smaller projects leading to smaller issue size of such bonds. This is in turn hindering the full-fledged development of the Green Bonds Market.

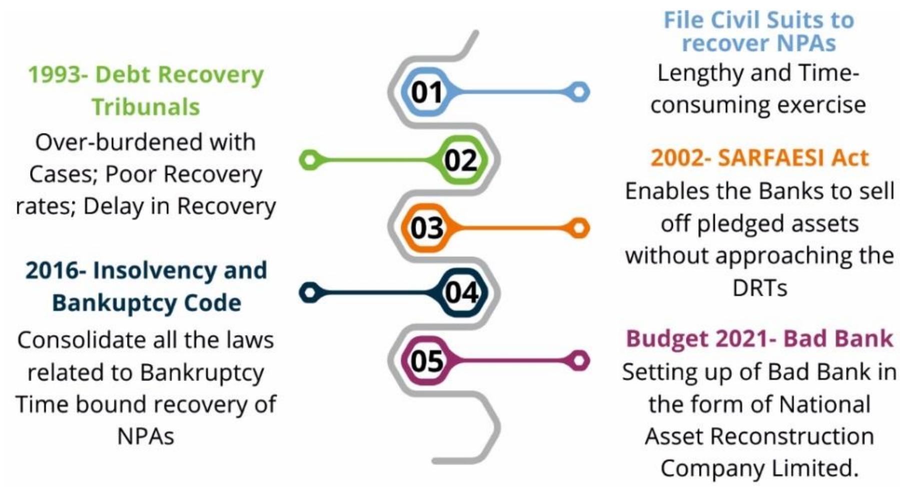
►AN APPRAISAL OF INSOLVENCY AND BANKRUPTCY CODE

The year 2021 marks the 5 years of completion of Insolvency and Bankruptcy code (IBC). In this regard, lets discuss about the hits and misses of IBC.

RELATIONSHIP BETWEEN FINANCIAL HEALTH OF BANKS AND ECONOMIC GROWTH



EVOLUTION IN THE FRAMEWORK FOR THE RESOLUTION OF NPAs



SARFAESI ACT,2002: Empowers banks to directly auction residential or commercial properties that have been pledged with them to recover loans from borrowers. As per the SARFAESI Act, if a borrower defaults on a loan, the Banks can give a notice period of 60 days to the borrower to repay the loans. If the borrower fails to repay within 60 days, the Banks can take the following actions:

1. Take possession of the pledged assets and then lease or sell it off to recover the loan amount.
2. Take over the management of the business of the borrower.
3. Appoint a person to manage the assets.

DIFFERENCE BETWEEN SARFAESI ACT AND IBC, 2016

1. SARFAESI- Applicable only for secured financial creditors; IBC- Applicable for both secured and unsecured financial creditors.
2. Unlike IBC, SARFAESI is not applicable to Operational Creditors.
3. The minimum threshold for invoking IBC: Individuals (Rs 1000); Companies (Rs 1 crore); Minimum threshold for SARFAESI: Rs 1 lakh.

HITS AND MISSES OF IBC, 2016

HITS	MISSES
1. **Higher Recovery rate** of 45% in comparison to recovery rate of 26% in the earlier regime. 2. **Time taken to close the cases:** Around 1 year in comparison to 3-4 years earlier. 3. Improvement in **Ease of Doing Business**	1. **Case Closure:** Only 60% of the cases closed. 2. **Mode of Case Closure**: Majority of cases closed through liquidation; Few cases closed due to Resolution.

4. Addresses the **Chakravyuha challenge** of Indian Economy:
- 1991 LPG Reforms has enabled easier entry of private sector but made the exit difficult.
- Old Inefficient firms continue to operate with highly efficient firms leading to misallocation of factors of production
- IBC has enabled faster exit of old inefficient firms

5. Behavioral Change

1. Fear of losing control of the company forces the promoters to operate at highest level of efficiency.
2. Encourages the borrowers to settle dues at the earliest.

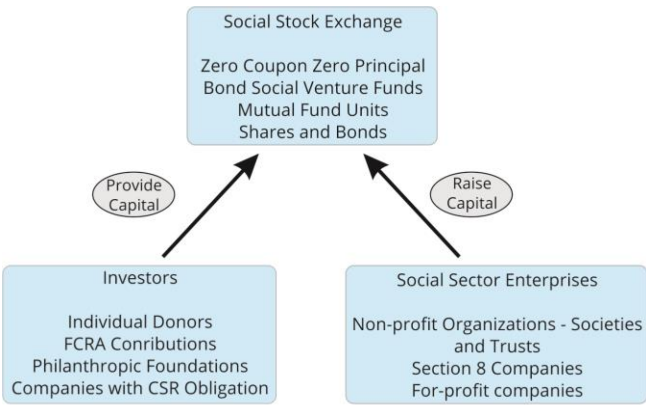
3. Recovery rates: Exclusion of large recovery cases such as Bhushan Steel, Essar Steel etc. would lead to recovery rate of around 35-36%.

4. Delay in admission of Applications and Approval of Resolution plans

5. Infrastructural issues: Less number of NCLTs; Delay in appointments; Higher vacancies etc.

►SOCIAL STOCK EXCHANGES

WHAT IS SOCIAL STOCK EXCHANGE (SSE)?



India needs huge amount of capital for social sector expenditure such as Education, Health, Sanitation, Housing etc. Usually, the investors are reluctant to invest in these sectors due to poor financial returns. However, the investment in these sectors has huge socio-economic returns in terms of improvement of standard of living, poverty alleviation, women empowerment etc.

Hence, in order to increase investment in the social sector expenditure, the Government has proposed Social Stock Exchange (SSE). It enables various societies, trusts, not-for- profit companies to raise capital for undertaking expenditure in social sectors.

For example, Brazil's Socio-environmental Impact Exchange (BVSA) was the first SSE. Some of the other SSEs across the world include- UK Social Stock Exchange, South Africa's SASIX, Canada's Social Venture Connexion.

RATIONALE FOR SETTING UP OF SSE IN INDIA

- Conventional capital focusses more on financial returns and not on socio-economic returns and hence does not invest in social sectors.
- India has over 3 million non-profit organizations. However, they face financial constraints. Hence, the SSE would enable the non-profit organizations to raise capital for social sector expenditure and thus enable India to meet various Sustainable Development Goals (SDGs)
- Provides a great opportunity for donors, philanthropic foundations, companies with CSR obligations to contribute to socio-economic cause.
- Helps to rebuild livelihoods affected by the COVID-19 pandemic

►ESG INVESTMENT

The ESG (Environmental, Social and Governance) investing has been able to attract a large number of investors in other countries. Taking a cue from these countries, the Indian mutual fund Industry has also been rolling out ESG funds for the benefit of Investors.

WHAT IS ESG INVESTING?

The ESG strategy revolves around investing in companies that score high on three non-financial parameters i.e. environment friendliness, social responsibility, and governance. The focus is on companies that adopt environment-friendly practices, produce products or services that influence society positively and conduct their business ethically.

Some of the aspects of ESG investment can include:

- Normally investors do not invest in sectors that are deemed harmful such as Tobacco, liquor etc. (Social Responsibility).
- The Investors make more investment in the companies which have reduced carbon footprint, follow emission norms, waste recycling etc. (Environment Friendliness)
- The investors avoid firms which have poor governance (Ethical Business)

SIGNIFICANCE OF ESG INVESTMENT

- Pressure from the investors force the corporate world to behave responsibly from a social, environmental and governance perspective

- Factors such as climate change and governance issues poses risks to corporate earnings. Companies that are aligned with ESG norms usually have lower risk of losses due to these factors.
- Benefits the Investors through increase in the corporate earnings.

SEBI'S FRAMEWORK FOR ENVIRONMENT FRIENDLY GOVERNANCE

- The Indian Institute of Corporate Affairs has developed a concept of National Voluntary Guidelines (NVGs) on Social, Environmental and Economic Responsibilities for adoption by the corporate sector.
- In 2012, the Securities and Exchange Board of India (SEBI) has mandated the Annual Business Responsibility Reporting (ABRR), a reporting framework based on the National Voluntary Guidelines (NVGs) on Social, Environmental and Economic Responsibilities of Business released by the Ministry of Corporate Affairs. These guidelines serve as a driver to pursue sustainable management practices.

►CORPORATES AS BANKS: PROS, CONS AND WAY FORWARD

In June 2020, the RBI had appointed Internal Working Group (IMG) to review the ownership guidelines and corporate structure of the Indian Private Banks. One of the most contentious recommendations submitted by this committee is to allow large corporate/Industrial houses to be the promoters of the Indian Banks. The acceptance of this recommendation would pave way for large corporates such as Reliance, Tata etc. to set up private sector Banks.

SHOULD CORPORATE/ INDUSTRIAL HOUSES BE ALLOWED TO SET UP BANKS?

A large corporate/industrial/business house is defined as a group having total assets of Rs 5000 crore or more wherein the non-financial business of the group accounts for more than 40 per cent in terms of total assets or gross income. The Committee has highlighted that the private sector Banks must be set up non-operative finance holding company (NOFHC) structure. This would provide for the separation of ownership and management control over the Private sector Banks.

Arguments in Favour	Arguments against
• Bring in Capital and necessary expertise in Banking • Improve the Credit-to-GDP ratio and facilitate Investment driven Model. • Reduce the Government's monopoly in banking sector and reap benefits (Example of Liberalisation of Telecom and Aviation Sectors) • Infuse competition in Banking Sector leading to higher efficiency. • Lead to development of large-sized banks to cater to credit needs of $ 5 trillion economy. • Leverage the Private sector Banks for the socio-economic development. (Ex: Jan Dhan Yojana, DBT etc) • Many Countries across the world have not explicitly prohibited entry of large corporate/Industrial houses.	**Prone to Shocks:** The Indian Economy remained less affected by Global financial crisis 2017-18 due to the dominance of the Public Sector Banks. **Conflict of Interest:** Corporate houses can involve in inter-connected lending. They can easily turn banks into a source of funds for their own businesses. They can also use banks to provide finance to customers and suppliers of their businesses. Tracing inter-connected lending is a challenge. **Contagion Impact:** Banks owned by corporate houses will be exposed to the risks of the non-bank entities of the group. **Poor Supervision and Regulatory oversight:** The recent failure of Yes Bank and Laxmi Vilas Bank has exposed the weakness in supervision of PSBs. Failure of Banks promoted by large corporate houses would be disastrous. **Concentration of Political and Economic Power**: Political biasedness in giving licenses to certain corporate houses; Anti-competitive practices; promotion of crony Capitalism. Misallocation of Credit: Possibility of diverting depositors' money only towards certain sectors and hence may affect financial inclusion. **Over-Burden RBI** leading to decrease in quality of Regulation. **Moral Hazard:** The Banks in India are rarely allowed to fail. They may have to be rescued by the Government which poses moral hazard.

WAY FORWARD

The issue of licences to the corporate houses should be preceded by number of reforms:

Strengthen Banking Regulation Act, 1949: The Federal Reserve Act in USA prohibits financial transactions of Banks with their affiliates. Hence, amendments to the Banking Regulation Act, 1949 should be done to prevent Inter-connected lending.

Consolidated Supervision: The RBI must be empowered to carry out the consolidated supervision of the Banks and their non-Banking entities to avoid any conflict of Interest.

Strengthen Supervisory Cadre: The RBI has set up Specialised Supervisory and Regulatory Cadre (SSRC) in November 2019 to strengthen and consolidate the supervision functions, which were scattered across different departments. The SSRC needs to be strengthened and given proper training.

Reforms in PSBs: The failure of Yes Bank and Laxmi Vilas Bank (LVB) has highlighted that it is not the ownership structure, rather the quality of corporate governance which determines the efficiency of the banks. Hence, the Government must also give due amount of emphasis on reforming PSBs as highlighted by P.J. Nayak Committee.

►FINTECH SECTOR- OPPORTUNITIES, CHALLENGES AND STRATEGIES

Fintech can be defined as **designing and provisioning of financial services by using new technological innovations**. Basically, fintech comprises of technology-based businesses that compete against, enable and/or collaborate with financial institutions. Examples: Paytm, MobiKwik, Policy Bazaar, Phonepe, Googlepay etc

Growth drivers: Rapid increase in the use of smartphones, internet connectivity, online shopping; Younger population; Advancements in technology such as Big data, AI etc; Improvement in Financial Inclusion; Launch of payment systems such as UPI; Regulatory support given by RBI etc.

EXAMPLES OF INNOVATIVE PRODUCTS OF THE FINTECH COMPANIES

- **Crowd funding** is a way of raising debt or equity from multiple investors via an internet-based platform. Example: Kickstarter, FuelAdream etc.
- **Peer-to-peer (P2P)** lenders connect lenders and borrowers via an internet-based platform. Example: Faircent, Lendenclub etc.
- **E-Aggregators** to compare the prices and features of a financial products. Example: Policy Bazaar
- **Account Aggregators**: An individual may have investments in fixed deposits with ABC Bank which comes under the purview of RBI, mutual fund investments with XYZ AMC which comes under the purview of SEBI and life insurance cover with DEF Insurance Corporation (which comes under the purview of IRDAI). Gathering and consolidating all the scattered data while applying for a loan may prove to be time-consuming. Hence, Individuals can authorize NBFC-aggregators to do this job and provide the information to Banks.

HOW CAN FINTECH COMPANIES BENEFIT THE INDIAN ECONOMY?

- **Increase in digital payments**
- **Improvement in Lending and Investment** through innovative tools such as Peer to Peer (P2P) lending, crowd funding etc.
- **Provide finances to the MSMEs** for trading of their invoices Example: TReDS Platform
- **Provide Insurance and advisory services**
- **Improvement in Credit Creation through the Account aggregator services**

RECOMMENDATIONS OF SUBHASH CHANDRA GARG COMMITTEE ON FINTECH SECTOR (2019)

Virtual banking: RBI should examine the suitability of 'virtual banking system' where banks do not need to set up branches and yet deliver the full scale banking services ranging from extending loans, savings accounts, issuing cards and offering payment services through their app or website

Removing discriminatory regulatory barriers: In order to boost digital payments in India, the National payment corporation of India should provide non-discriminatory access to fintech firms on par with Banks.

Fintech for Cyber Security: The fintech firms specialising in field of cyber security should be encouraged to set up their businesses in India and provided necessary regulatory approvals for expanding their services in the country.

Flow-based lending to MSMEs: The GSTN data integrated with TReDS exchanges should form the basis of a flow-based lending system for MSMEs by banks and NBFCs.

Reforming P2P markets: The credit needs of MSMEs, households and individuals can be taken care of by creating a marketplace model of debt financing where savers, non-banks and banks are all permitted to lend. The Ministry of Finance should develop a marketplace model of debt financing in India.

Remote Sensing and Drone Tech for Credit and Insurance: Insurance Companies and Lending agencies in Agri sector should be encouraged to use drone and remote sensing technology for crop area, damage and location assessments to support risk reduction in insurance/lending business.

Digitisation of Land Records: The Government should take up modernisation and standardisation of land records in the country on a war footing and complete such an exercise within 3 years.

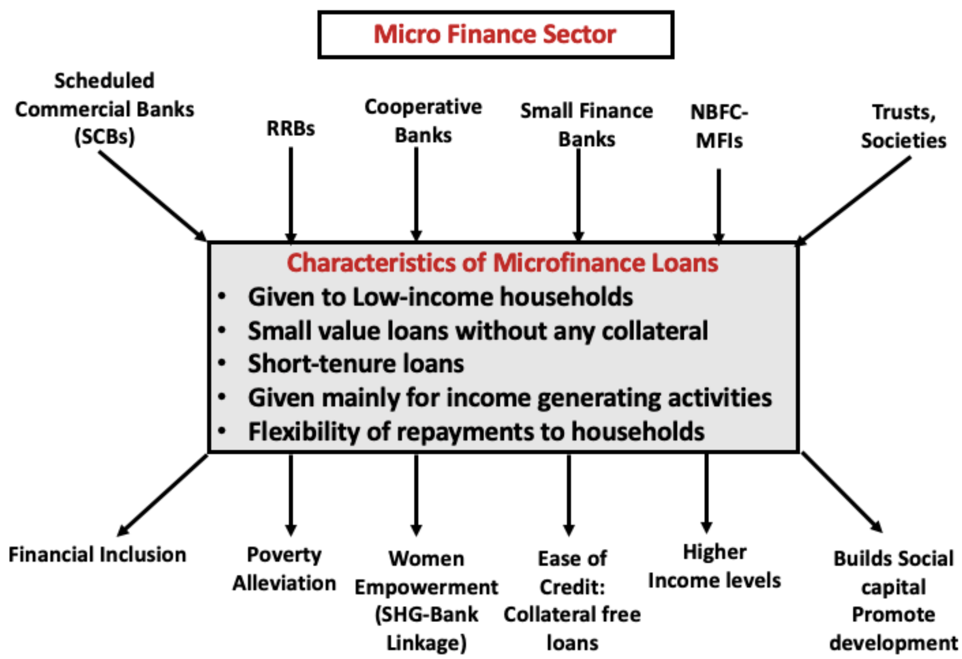
Legal Framework for Customer Protection: A legal framework for consumer protection should be put in place keeping in mind the rise of fintech and digital services.

Development of Regulation Technology (RegTech): Regtech is a new field within the financial technology industry that utilizes information technology to enhance regulatory processes. It puts a particular emphasis on regulatory monitoring, reporting and compliance. The financial sector regulators (RBI, SEBI, IRDAI, and PFRDA) must develop standards for RegTech by financial sector service providers to make compliance with regulations easier, quicker and more automated for regulated entities. It will enable them to meet their increasingly strict know-your-customer (KYC), anti-money laundering (AML) and counter-terrorist financing (CTF) requirements.

Development of Supervision Technology: The Supervision technology is the application of technology by the financial regulators so as to strengthen their regulatory and supervisory role. The committee has recommended that financial sector regulators (RBI, SEBI, IRDAI, and PFRDA) must focus on developing supervision technology.

►MICROFINANCE SECTOR- OPPORTUNITIES AND CHALLENGES

Microfinance is a tool to promote financial inclusion, enable the households to come out of poverty and increase their income levels. It can facilitate achievement of national policies such as poverty reduction, women empowerment, improvement in the standards of living etc.



EVOLUTION OF MICRO FINANCE SECTOR IN INDIA

1992: NABARD's SHG-Bank Linkage programme. Banks started lending to Women-led SHGs based upon the money which these SHGs saved in the bank accounts.

1992 to 2010: No separate RBI guidelines for the Micro finance sector. Facilitated rapid growth of micro-finance institutions (MFIs). These MFIs operated in regulatory vacuum and hence led to their exponential growth. This phase saw the growth of large sized MFIs such as SKS Microfinance, Spandana etc.

2010: Andhra Pradesh Microfinance crisis. MFIs indulged in unethical practices such as charging higher interest rates, adoption of forced recovery techniques, not following due diligence in giving loans etc. Led to suicide by large number of people in the rural areas.

2011: Appointment of Malegam Committee on Regulation of MFIs. Committee recommended creation of separate category of MFIs called as NBFC-MFIs. Called upon RBI to lay down comprehensive guidelines.

2011-2020

- RBI created separate category of NBFC-MFIs and has laid down comprehensive regulatory framework.
- Some of the MFIs have been merged into Banks while some MFIs have been issued license to operate as Small finance Bank
- Bandhan Financial services, which was an MFI earlier, has been issued license for Universal Bank

Present Status: The total micro-finance loans stand at Rs 2.7 lakh crores. The highest share is accounted by the SCBs (40%). The NBFC-MFIs account for 30% of the loans.

SUMMARY OF THE RBI'S RECOMMENDATIONS ON THE REGULATORY FRAMEWORK FOR THE MFIS

Criteria	Problems in the Present Framework	Proposed Framework
Applicability	• RBI's guidelines on microfinance sector is applicable only to the NBFC-MFIs, which account for only 30% of the micro-finance loans. • It is not applicable to SCBs, RRBs, Cooperative Banks etc.	Guidelines to be made applicable to SCBs, RRBs and Cooperative banks
Definition of Micro finance loan	No Common Definition; RBI's definition of what constitutes Micro-finance loan is applicable only to NBFC-MFIs	Present definition of Micro-finance loan should be extended to SCBs, RRBs and Cooperative Banks
Indebtedness	**Present Guidelines:** A single borrower cannot borrow from more than two NBFC-MFIs. **Problems:** • Borrowers take multiple loans from SCBs, RRBs, Cooperative banks etc. leading to over borrowing. • Puts strain on household finances for repayment of principal and interest	Presently, there is a limit on household borrowings which cannot exceed Rs 1.25 lakh per borrower. Rather than having uniform limit, there is a need to have a limit which is based on the household income. Borrowers should not be allowed to borrow more than 50% of their income.
Interest Rate	**Present Guideline:** The ceiling on the interest rate by the NBFC-MFIs based upon the formula given by the RBI. (***No need to know the formula for UPSC Exam)*** **Problem:** • Interest rate applicable only on 30% of the loans given by NBFC-MFIs. Not applicable to SCBs, RRBs etc. • Fixing of ceiling on the interest rates has hampered competition among the NBFC-MFIs	• Interest rates on the micro-finance loans should be left to the discretion of the individual Banks. ***(With suitable safeguards to ensure that they don't charge higher interest rates)*** • RBI feels that this will promote competition among the Banks and help us in bringing down the interest rates on the loans.
Collateral free loans	Presently, applicable only to NBFC-MFIs	Must be extended to SCBs, RRBs and Cooperative Banks

SECTION-6

BUDGETING AND TAXATION

Previous Year Questions

SUB- THEME	YEAR	QUESTION
Budgeting	2013	What are the reasons for introduction of Fiscal responsibility and Budget Management (FRBM) act, 2003? Discuss critically its salient features and their effectiveness.
		What is meaning of the term tax-expenditure? Taking housing sector as an example, discuss how it influences budgetary policies of the government.
	2015	In what way could replacement of price subsidy with Direct Benefit Transfer (DBT) change the scenario of subsidies in India? Discuss.
	2016	Women empowerment in India needs gender budgeting. What are the requirements and status of gender budgeting in the Indian context?
	2017	One of the intended objectives of Union Budget 2017-18 is to 'transform, energize and clean India'. Analyse the measures proposed in the Budget 2017-18 to achieve the objective.
	2019	The public expenditure management is a challenge to the government of India in the context of budget making during the post-liberalization period. Clarify it.
Taxation	2018	Comment on the important changes introduced in respect of the Long-term Capital Gains Tax (LCGT) and Dividend Distribution Tax (DDT) in the Union Budget for 2018-2019.
	2019	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.
	2020	Explain the rationale behind the Goods and Services Tax (Compensation to States) Act of 2017. How was COVID-19 impacted the GST compensation fund and created new federal tensions?

►15TH FINANCE COMMISSION RECOMMENDATIONS

The 15th Finance Commission headed by Mr. N.K. Singh has recently submitted its recommendations. Usually, the Finance Commission recommendations are valid for a period of 5 years. However, this time, the 15th Finance Commission recommendations would be valid for a period of 6 years. Earlier, the 15th Finance Commission had submitted its first set of recommendations which were applicable for the financial year 2020-21. Now, the commission has submitted its second report, whose recommendations will be applicable for the next 5 years i.e., 2021-2026.

IMPORTANT RECOMMENDATIONS OF 15TH FINANCE COMMISSION

Vertical Devolution of Taxes: The share of states in the central taxes for the 2021-26 period is recommended to be 41%, same as that for 2020-21. This is less than the 42% share recommended by the 14the Finance Commission for 2015-20 period. The adjustment of 1% is to provide for the newly formed union territories of Jammu and Kashmir, and Ladakh from the resources of the Centre.

CRITERIA FOR THE HORIZONTAL DISTRIBUTION OF TAXES AMONG THE STATES

Criteria	14th Finance Commission	15th Finance Commission
Income Distance	50	45
Population (1971 Census)	17.5	Not Considered
Population (2011 census)	10	15
Demographic Performance	Not Considered	12.5
Forest Cover	7.5	Not Considered
Forest and Ecology	Not Considered	10
Area	15	15
Tax Effort	Not considered	2.5
Total	100	100

ANALYSIS OF THE CRITERIA USED BY THE 15TH FINANCE COMMISSION

Earlier, the 15th Finance Commission has asked to explore the possibility of using the Population of 2011 census instead of 1971 census for the devolution of taxes. However, this was opposed by the Southern states. These states have taken substantial efforts to reduce the Population growth rates by undertaking the Family planning programmes since 1970s. So, naturally, if the criteria of 2011 census were to be used, this would lead to loss in the share of their taxes. Here, the Finance Commission has done a fine balancing between the directions issued by the centre and concerns raised by the Southern states.

It has used the Population of 2011 census and done away with the Population of 1971 census. However, keeping in mind, the concerns raised by the Southern states, it has introduced the new criteria of Demographic performance. The Demographic performance indicator looks at the Fertility rate in a state. If the fertility rate in a particular state is lower, it would mean that such a state has taken substantial efforts to reduce its population growth rate and accordingly it would get a higher share. Since, the fertility rate in the southern states is much lower, the introduction of such an indicator is likely to reduce the impact caused by using the criteria of 2011 census instead of 1971 census.

GRANTS-IN-AID

Revenue Deficit Grants worth Rs 74,000 crore to these 14 states.

Grants to local bodies: The total grants to local bodies for 2020-21 has been fixed at Rs 90,000 crore. This allocation is 4.31% of the divisible pool. This is an increase over the grants for local bodies in 2019-20, which amounted to 3.54% of the divisible pool. The grants will be divided between states based on population and area in the ratio 90:10. The grants will be made available to all three tiers of Panchayat- village, block, and district.

Disaster risk management: The Commission recommended setting up National and State Disaster Management Funds (NDMF and SDMF) for the promotion of local-level mitigation activities.

Centrally Sponsored Schemes (CSS)

Present Status: The Union Budget 2020- 21 shows that fifteen of the thirty umbrella CSS account for about 90 per cent of the total allocation under CSS. Many umbrella schemes have, within them, several small schemes, some of them with negligible allocations.

Recommendations: It is important to gradually stop the funding for those CSS and their subcomponents which have either outlived their utility or have insignificant budgetary outlays not commensurate to a national programme. There should also be a minimum threshold funding size for the approval of a CSS. Below the stipulated threshold, the administrating department should justify the need for the continuity of the scheme. Third-party evaluation of all CSS should be completed within a stipulated timeframe.

FUNDING OF DEFENCE AND INTERNAL SECURITY

Present Status: Defence expenditure has, over time, been characterised by a higher share of revenue expenditure, huge pension bills and lower capital expenditure with high dependence on import of defence equipment.

Recommendations: A dedicated non-lapsable fund called the Modernisation Fund for Defence and Internal Security (MFDIS) should be constituted under the Public Account for capital expenditure in defence and internal security. The fund will be funded through (a) Transfers from the Consolidated Fund of India (b) Disinvestment of defence PSUs (c) Monetisation of defence lands.

►OECD TAX PROPOSALS AND IMPLICATIONS FOR INDIA

Several multinational companies usually shift their profits from high tax jurisdiction to tax haven countries such as Mauritius, Singapore, Hongkong, Cayman Islands, Panama, Bermuda etc. through "Base Erosion profit Shifting" (BEPS). Hence, to prevent BEPS, recently, India has joined the OECD Inclusive framework on BEPS. Under the OECD/G20 Inclusive Framework on BEPS, 140 countries (including India) are collaborating to put an end to tax avoidance strategies of the MNCs.

PILLAR 1 OF OECD: ALLOCATION OF PROFITS OF MNCS AMONG THE COUNTRIES

Present Status: The existing tax norms have been framed keeping in mind the brick-and-mortar business models. Hence, these tax norms are not suitable to tax internet-based companies such as Google, Amazon, Microsoft etc. These digital MNCs do not pay tax in the country in which they earn profits. This is because they may operate business without establishing any physical presence.

Implications: This leads to revenue loss of around $ 100 bn on an annual basis for the countries across the world.

Example: While Facebook has users in every country, it doesn't have physical operations in every country. A country like India might have millions of Facebook users and Facebook is earning huge profits from those users. However, since Facebook has no physical presence in India, the company does not pay tax here.

Proposal: Pillar One addresses ***nexus rules (or where tax will be paid) and new profit-allocation rules (or what portion of a MNCs profits will be taxable).*** The idea here is to ensure that the MNCs should pay fair share of tax wherever they operate. It would ensure that the certain profits of the MNCs would be shared between the countries where the MNC has significant economic presence. So, in future, the profits of these companies would be shared among countries in which they operate.

APPLICABILITY

Which MNCs would be covered? MNCs which have global annual revenues of above 20 billion euros and profit margin of more than 10%. MNCs which do not fulfil this criteria will not be required to pay tax.

What will be the tax rate? 20-30% of the *residual profits* earned by the MNCs. The residual profit is computed as profit more than a certain profitability threshold percentage (in this case, it is 10%).

For example, let's say a particular MNC has global revenues of around $ 100bn and overall profits of $ 15 bn. So, its profit margin is 15%. Its residual profits would be profits more than threshold of 10% i.e., 5% ($ 5 bn). Accordingly, 20-30% of the Residual profits ($ 5 bn) would be imposed as tax on such an MNC.

Which all countries would be allocated tax? A country would get its share of tax if a particular MNC (which fulfils the above criteria) earns at least 1 million euros in revenue in that country.

On what basis will profit be allocated to different countries? Based on the share of revenue earned by

MNC in that country. For example, if a MNC earns 10% of its revenue in country "X", then the country "X" would get 10% of the share of the profits which are allocated between different countries.

Example: For example, let's say a particular MNC has residual profit of $ 100bn. 20-30% of the residual profit would be shared among the countries. Let's consider this as $ 20bn (20% of Residual profit of $ 100bn). So, in this case, the above country "X" would get 10% of the share of $ 20bn i.e., $ 2bn.

PILLAR 2: GLOBAL MINIMUM CORPORATE TAX

Proposal: All the countries across the world need to impose minimum corporate tax of 15%. Please do understand that it is the minimum corporate tax which should be applicable. The countries would have complete flexibility to fix corporate tax rates above 15%. Ideally, no country should have corporate tax rates below 15%.

Working Mechanism: If any country adopts corporate tax below 15%, then in that case, a particular MNC would pay the lower corporate tax to such a country and the remaining tax amount (Minimum Corporate Tax amount of 15% - Prevailing tax rate in a particular country) would be paid to the country to which the company originally belongs.

All the countries agree to impose minimum corporate tax at 15% Countries to have flexibility to fix corporate tax above 15% If any country fixes the corporate tax below 15%, then the difference tax amount to be paid to be country to which the company originally belongs.

Different Scenarios	Tax Rates		Tax Paid	
	USA	Country XYZ	USA	Country XYZ
Scenario 1 • US based Company operating in country XYZ (India) • Annual Profits: $100bn • Minimum Tax liability: $15 bn	28%	15%	0	$15bn
Scenario 2 • US based Company operating in country XYZ (Mauritius- Tax Haven) • Annual Profits : $100bn • Minimum Tax liability: $15bn	28%	10%	$5bn	$10bn
Scenario 3 • US based Company operating in country XYZ (China) • Annual Profits : $100bn • Minimum Tax liability: $15bn	28%	25%	0	$25bn

Global Minimum Corporate Tax	
Rationale	**Challenges**
Proposed Tax hikes in USA: During Trump's Presidency, the corporate tax rates in US was reduced from 35% to 21%. Now, the Joe Biden Administration seeks to increase the corporate tax rate from 21% to 35% to raise revenue and provide stimulus measures. However, the proposal to increase the tax rates might prompt the US based companies to shift their bases to other low tax jurisdictions. Hence, the idea is to prevent the US based companies from shifting their bases to low tax jurisdiction countries. **Target Low Tax Jurisdictions:** According to research by the Tax Justice Network campaign group, total revenue lost at the global level on an annual basis due to BEPS is as high as $ 427bn. India's annual tax losses due to corporate tax abuse are estimated at over $10 billion. Almost $8.7 trillion of global wealth is stored in these low-tax jurisdictions. **Target**	**Mainly serves the Interests of USA:** Proposal put forward to finance $ 2 trillion spending programme; 30% of Forbes 2000 MNCs American based and hence US government would be the ultimate beneficiary. **Against Interests of Poor and developing countries** which uses lower tax rates as a tool to attract foreign investment and boost GDP growth. **Difficult to achieve consensus** among multiple countries at international level.

Technological companies such as GAFAM which end up paying lower taxes due to BEPS. **Prevent "Race to the Bottom":** According to OECD, countries across the world are locked in intense competition to attract foreign investment by reducing the corporate tax rates. The average corporate tax rate has fallen from 32% in 2000 to 23% in 2018. **Compulsions before the US Government** to reduce FD, higher Debt levels and finance $ 2 trillion spending programme	**Goes against Principle of Sovereignty** as the country would lose their freedom to fix low tax rates.

IMPLICATION OF PILLAR 1 AND PILLAR 2 ON INDIA

The OECD is set to finalize the proposals on both Pillar 1 and Pillar 2 by the end of October 2021. Let's understand its implications on India and what should be India's stand.

Revenue Implications: Since India has a large consumer base for companies such as Facebook, Google, Amazon etc., India would be able to get a bigger share of their profits as compared to other countries. However, as of now, it is difficult to quantify the amount of taxes which would flow to India.

Doing Away with Equalization levy: India has unilaterally imposed Equalization levy to bring digital companies under the ambit of tax. The finalization of OECD deal would mean that India would have to do away with Equalization levy. India needs to be cautious here. It needs to ensure that the revenue gains from the OECD deal is much higher than the revenue earned through Equalization levy.

Expansion in scope of MNCs covered: The Pillar 1 covers only those MNCs which have global annual revenues of above 20 billion euros and profit margin of more than 10%. This criteria would include only the bigger MNCs (such as Google, Apple, Facebook etc) and leaves out smaller MNCs. Hence, India needs to argue for lowering the criteria and bring even the smaller companies under the tax bracket.

Tax Rates: The Pillar 1 proposes tax rate which ranges between 20% to 30% of residual profits above 10% profit margin. The developed economies have argued for a lower tax rate of 20%, while India has demanded for the tax rate to be at higher end of 30%. India needs to ensure its interests and concerns are taken into consideration.

Indian IT Companies: Indian IT companies with a global footprint in business will have to evaluate their current business models and how the OECD proposals would impact them.

Global Minimum Corporate Tax rates: India has brought down the corporate tax rate to 15% for the domestic manufacturing companies, which is on par with the OECD proposal. The adoption of Global minimum corporate tax would put a dent in the appeal of low-tax jurisdiction countries and can help India to attract foreign companies to set up their bases here. Similarly, it would discourage the Indian companies from setting up bases in tax havens solely for the purpose of tax avoidance.

►CAN CAPITAL EXPENDITURE BOOST ECONOMY?

To deal with Economic slowdown, the Union Budget 2021-22 has substantially enhanced the Capital Expenditure to ensure multiplier effect, boost both demand and supply, crowd-in private sector investment, revive the animal spirits and kickstart Indian economy. However, it is easier said than done. The ability of capital expenditure to boost long-term growth is saddled with multi-faceted challenges.

Trends in Revenue and Capital Expenditure in India: The share of revenue expenditure in the total expenditure has increased from 73% in 1990 to 84% in 2021. However, the share of Capital Expenditure has reduced from 27% in 1990 to 12% in 2019-20. Similarly, a higher share of our borrowings (Fiscal Deficit) is used for funding Revenue Expenditure rather than Capital Expenditure. This shows a consistent decline in the quality of Fiscal Deficit in India.

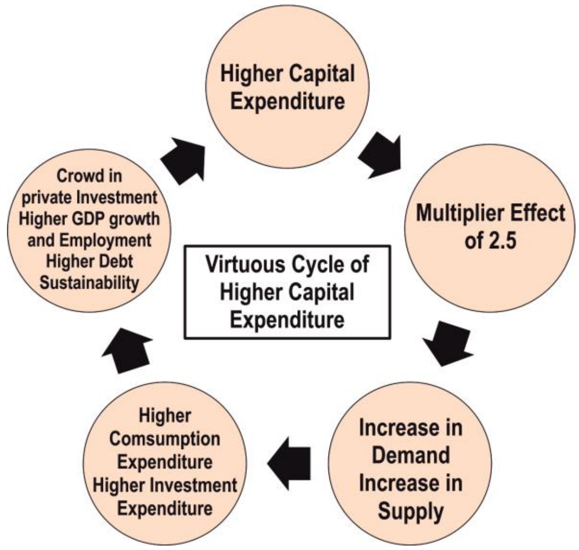
CASE FOR INCREASE IN CAPITAL EXPENDITURE

Revive Economy: In India, the capital expenditure multiplier is around 2.45, while the revenue expenditure multiplier is 0.99 (RBI Bulletin, Dec 2020). Thus, for a Rs. 1 crore increase in capital expenditure, GDP increases by Rs. 2.45 crores, whereas if there is a 1 crore increase in revenue expenditure, the GDP increases only by Rs.0.99 crore.

Crowd-in Private sector Investment as the Government expenditure on creation of capital assets would boost demand for Goods and services produced by the Private sector entities.

Shift gears from Consumption driven to Investment driven economy as recommended by Eco Survey 2019-20

Higher Debt Sustainability: The Economic Survey 2020-21 has highlighted that India need not be worried about Quantity of Public Debt, rather we should be worried about our capacity to repay. Our capacity to repay in turn depends upon Interest rate growth differential (IRGD.



Relationship between Public Debt and GDP Growth

Modern Approach: Don't worry about Quantity of Public Debt rather about Capacity to repay

Debt Rs 1000 → Borrow Rs 100, Interest: 8%, Maturity: 10 years (Rate of Interest) → Make Investment in Capital Assets → Generate Revenues worth Rs 112 (Rate of Returns)

Interest Rate-Growth Differential (IRGD) = Interest rate- GDP growth rate

Interest Rate	GDP Growth rate	IRGD	Repaying Capacity
10%	8%	2%	Poorer
10%	10%	0%	Poor
10%	12%	-2%	Good
12%	15%	-3%	Better
12%	20%	-8%	Best

More Positive the IRGD, harder and slower for Government to repay

More negative the IRGD, easier and quicker for Government to repay

Plug gaps in Infrastructure: India needs to spend $4.5 trillion on infrastructure by 2030 to sustain its growth rate. Higher Capital expenditure would lead to creation of world class infrastructure in terms of Roads, railways, ports etc.

Reduce Logistics cost and boost Make in India: Higher Capital expenditure would help us bring down the logistics cost from around 12%-14% of the GDP to the global benchmark of around 8-10% of GDP.

Boost Employment Creation: Higher Capital expenditure would create more employment opportunities, enable people to earn their livelihoods and boost demand in the economy.

Concerns and challenges

Neglect of Immediate needs of the people: According to some of the economists, instead of providing benefits to the people in the form of cash transfers, free ration, Education, healthcare etc. to deal with Covid-19 pandemic, Government ends up giving more emphasis on creation of capital assets.

Problem of Time lag as the increase in the capital expenditure would not have immediate impact on the economy.

Multiplier effect may not be come into being as the private sector may not increase its investment due to fear to lower GDP growth rates and lower rate of returns. Similarly, due to unforeseen circumstances prevailing in the economy, people may decide to save money instead of spending leading to decline in demand.

Crowd out Private sector investment due to higher government borrowings.

Time and cost over runs in completing infrastructure projects could lead to lower rate of returns and hence make the projects financially unviable.

Poor quality of asset creation can lead to higher recurring expenditure on maintenance.

WAY FORWARD

The Budget 2021-22 has rightly prioritised on Capital Expenditure. However, the Government must address some of the constraints such as **time and cost overruns, improving Ease of Doing Business** etc. At the same time, new initiatives such as **Development Banks and National Monetisation Pipeline** must be implemented in the right earnest. The government should also aim to cut down on inefficient revenue expenditure and focus on creating a balanced and stable virtuous cycle, which can have positive knock-on effects over the long term.

►CONCERNS WITH OFF-BUDGET FINANCING

The Off-Budget Financing refers to the expenditure undertaken by the PSUs through the market borrowings based upon guarantee of repayment of loans given by Government. For example, let's say the government needs to invest in the Railways. It may ask the Indian Railway Finance Corporation (IRFC) to borrow money from the market and finance railway projects. However, the Government guarantees the repayment of principal and interest for the money borrowed by Indian Railway Finance Corporation in case it fails to repay the borrowed money.

CONCERNS WITH OFF-BUDGET FINANCING

According to various Estimates put forward by Subhash Chandra Garg, the Off-budget Expenditure accounts for at least 1% of India's GDP, which appears to be quite huge. The same concern was raised even by Comptroller and Auditor General (CAG) in March 2019.

Decrease in Government's Financial Accountability: The Government's strategy to meet capital expenditure through off-budget financing provides flexibility in meeting requirement of capital-intensive projects. However, such financing **remains outside budgetary control** of the Parliament.

Decrease in Fiscal discipline: The increase in the off-budget expenditure highlights that the Government has not been able to manage its finances efficiently and thus there is greater level of fiscal indiscipline.

Enhanced Financial Risk: The increase in off-budget financing poses enhanced risk for the Government, particularly when the Government agencies which borrow money from market based on government guarantee fails to repay such loans. Under such circumstances, the Government would be required to pitch in and fulfill its obligations.

Reduced Sanctity of Government's Finances: Ideally, the Government guarantee on repayment of bonds should be accounted under Debt and Liabilities so as to provide correct picture about its finances. However, since it is not accounted, it would lead to **understating of Government's borrowings** and do not present correct picture related to fiscal indicators such as Fiscal Deficit and Revenue Deficit.

HOW TO ADDRESS THIS PROBLEM?

The office of CAG has given a number of recommendations to tackle the problem of off-budget financing. **Some of these recommendations include:**

- The Government of India must put in place policy framework for off-budget financing in order to provide for enhanced disclosure to the Indian parliament. Such a policy framework must mandate the Government to highlight the rationale and objective of undertaking off-budget financing.
- The Government must come out with the quantum of off-budget financing and the way it has been undertaken every year.
- The Government must disclose all the details about the off-budget financing through the disclosure statements in the Budget.

►FISCAL COUNCIL IN INDIA

The Chairman of the 15th Finance Commission, NK Singh has recommended setting up of institutional mechanism like a 'Fiscal Council' to fill major institutional gap in India's Fiscal System.

WHAT IS FISCAL COUNCIL?

A fiscal council is an independent and non-partisan agency which is set up to publicly assesses the government's fiscal performance against its stated objectives. Fiscal Councils can serve both ex ante and ex post functions such as

- Producing independent forecasts related to GDP growth, tax buoyancy, inflation rate
- Review the government's forecasts and assumptions related to tax collections, Fiscal Deficit, GDP Growth etc (an ex ante function)
- Monitoring governments' fiscal performance including adherence to fiscal rules (an ex post function)

International Experience with Fiscal Council: Fiscal councils can improve fiscal outcomes and accuracy related to government's forecasts related to fiscal parameters. Example: United Kingdom(Office of Budget Responsibility), USA (Congressional Budget Office)

Committees related to Fiscal Council: FRBM Review committee headed by N.K Singh and D.K. Srivastava Committee on Fiscal Statistics have proposed to set up independent Fiscal Council in India.

NEED FOR FISCAL COUNCIL IN INDIA

- Promotes coordination among multiple agencies involved in collection of the fiscal data.
- Produce Independent forecasts related to various parameters such as GDP, Tax collection, Deficits etc.
- Advise the Government on the formulation of Budget.
- Monitor Government's fiscal performance to FRBM Targets
- Ensure greater accountability of the Government to the Parliament.
- Act as counterpart to the Monetary Policy Committee
- Address the problem of Off Budget Financing.

WHAT SHOULD BE THE ROLE OF FISCAL COUNCIL IN INDIA?

- **Fiscal Data Coordinator:** As a fiscal data coordinator, the Fiscal Council should have the responsibility of compiling and collating centre, state, and local government fiscal data and provide individual and consolidated fiscal accounts of the governments in India on a timely basis and make such data accessible to governments and public.
- **Fiscal Data Analyst:** It should utilize the compiled fiscal data to provide valuable insights into the underlying fiscal trends and highlight their policy significance.
- **Fiscal Consolidation Path Monitor:** The central as well as state governments follow their respective fiscal consolidation paths according to targets set under their FRBM Acts. The Fiscal Council should monitor the compliance of these targets by the Central and State Governments. It should highlight deviations in the targets by publishing quarterly and annual reports.
- **Fiscal Policy Advisor:** Fiscal Council should provide guidance to the central and state governments on appropriate fiscal policy interventions aimed at improving growth and macro-stabilization outcomes.

►STRENGTHENING FISCAL FEDERALISM

Recently, leading Indian Economist, Vijay Kelkar has argued for strengthening Fiscal Federalism in India wherein he has highlighted the need to empower NITI Aayog to transfer funds to the states so as to promote balanced regional development. On the other hand, some of the economists have pitched for granting permanent status to the Finance Commission under Art 280.

UNDERSTANDING FISCAL FEDERALISM

The Fiscal federalism is economic counterpart of Political Federalism. The Fiscal Federalism essentially consists of 2 aspects:

- Assignment of functions to different levels of Governments
- Allocation of financial powers

NEED TO HAVE PERMANENT FINANCE COMMISSION

- Over a period of time, Finance Commissions have adopted different approaches with regard to principles of tax devolution, grants to be given to states and fiscal consolidation issues.
- Even though, there has to be a framework for fresh and innovative thinking by every Finance Commission; at another level, there is a need to ensure broad consistency between Finance Commissions so that there is some degree of certainty in the flow of funds to the states.
- (For example, 14th Finance Commission has provided for tax devolution of 42% as compared to 32% provided by 13th Finance Commission. Further, the 14th Finance Commission has added the parameters of Area under Forests and Demographic Change (2011 census) for the horizontal tax devolution. The fiscal discipline parameter used by 13th Finance Commission has been done away with by 14th Finance commission.)

NEED TO STRENGTHEN NITI AAYOG

Vijay Kelkar is of opinion that the present mechanism of setting up of Finance Commission every 5 years is working perfectly fine. However, there is a need to strengthen fiscal Federalism by empowering the NITI Aayog with transfer of finances.

Rationale

- The Planning Commission was involved with transfer of finances to the states which to a certain extent were able to reduce the regional imbalances existing among the different states in India. However, the Planning Commission was replaced by NITI Aayog, which acts more like a think tank without the power of transferring finances.
- Two problems have arisen with respect to this. Firstly, **India's Fiscal Federalism stands only on one pillar**,

viz., Union Finance Commission. This is a serious weakness of our present Fiscal Federalism and needs to be quickly corrected.

- Secondly, India has been experiencing the process of "**Conditional Convergence**" amongst the different States wherein the poorer states have been growing more rapidly than richer states leading to reduction in income inequality. Such conditional convergence has been possible on account of transfer of finances by the Planning Commission.
- Thus, there is a strong analytical case for strengthening the role of NITI Aayog with powers of allocating finances to states.
- In order to make the new NITI Aayog more effective, it is essential to ensure that the institution is at the "High Table" of decision making of the Government. This means the Vice Chairman of the new NITI Aayog will need to be a permanent invitee of the Cabinet Committee on Economic Affairs. Thus, the new NITI Aayog will make available to the highest level of policy making the knowledge-based advice and provide the national and long term perspective on the policy proposals.

►TENSIONS IN FISCAL FEDERALISM

Erosion of Fiscal autonomy of states under GST regime:

- With the advent of the GST regime, States surrendered the power to levy many taxes. Ex: state sales tax, octroi, Entertainment tax etc.
- State governments cannot change the rates of GST on their own according to their fiscal needs.
- Loss of revenue to the manufacturing states since GST is a destination-based tax.

Delay in payment of GST compensation to states.

States share in overall tax revenues has stagnated because the non-divisible pool of cesses and surcharges has been increasing.

Union government laid down several conditions to increase the borrowing limits of the state governments.

15th Finance commission has given more weightage to the population criteria in Horizontal devolution formula

STEPS TO STRENGTHEN FISCAL FEDERALISM

Flexibility should be given to the states to increase tax during crisis. Ex: Kerala government was allowed to levy 1% Calamity cess on GST to reverse the devastation caused by the floods

Flexible borrowing limits for fiscally prudent states, which have not breached FRBM limits and managed overall debt at sustainable levels

Extension of GST compensation beyond 2022 should be considered. However, the 14% assumed growth rate should be revised keeping in view of present economic scenario.

►PERFORMANCE ANALYSIS OF GOODS AND SERVICES TAX (GST)

The new GST system was implemented on 1st of July 2017 to replace a number of central and state taxes on the same base with a country-wide common framework. As each State levied its own VAT, the tax system was fragmented with different rates being applied for similar sales of goods.

BRIEF OUTLINE OF THE GST SYSTEM

Legal Framework: The legal regime of GST includes four Central laws (the Central Goods and Services Tax (CGST) Act, Integrated Goods and Services Tax (IGST) Act, the Union Territories Goods and Services Tax (UTGST) Act and the Goods and Services (Compensation to States) Act along with twenty-four state laws, the relevant State Goods and Services Tax (SGST) Act

Policy Framework: The GST system is based on a system of multiple rates to various categories of sales (0%, 5%, 12%, 18%, 28% and additionally 0.25% for precious stones and 3% for gold).

Tax Administrative Framework: The administration of the GST is done in parallel by the Central and the State GST administrations with the powers to audit and administer shared. To support the administration of the taxpayers, a common nation-wide IT backbone called the GST Network (GSTN) has been put in place through which all tax returns are required to be filed.

POSITIVES: Done away with Cascading effect of Tax on Tax + One Nation One Tax + Improved Tax Compliance + Increase in number of registered tax payers + Lower cost of Goods and Services + Improvement in Ease of Doing Business

ISSUES IN GST IMPLEMENTATION AND FUNCTIONING

The 15th Finance Commission has highlighted some challenges with the implementation of the Goods and Services Tax (GST). These include:

Stagnation in Revenue: Monthly GST collections crossed Rs 1 lakh crore in April 2018 and since then remained stagnant.

Inverted Duty Structure: The term 'Inverted duty Structure' refers to a situation where the rate of tax on inputs purchased (i.e., GST Rate paid on inputs) is more than the GST rate on finished goods. The inverted duty structure leads to higher input tax credits and hence lower tax collection for the Government.

Complexity: The GST was introduced to simplify the tax structure and improve the tax compliance. However, the existing GST regime has multiple rates: 0, 0.25, 1, 3, 5, 12, 18 and 28%.

Coverage: Petroleum crude, petrol, high speed diesel, Aviation Turbine Fuel (ATF), Natural gas etc. are still outside GST.

Issues in Refunds: Delays in GST refunds, recent unearthing of fake invoices and fraudulent practices to corner input tax credit.

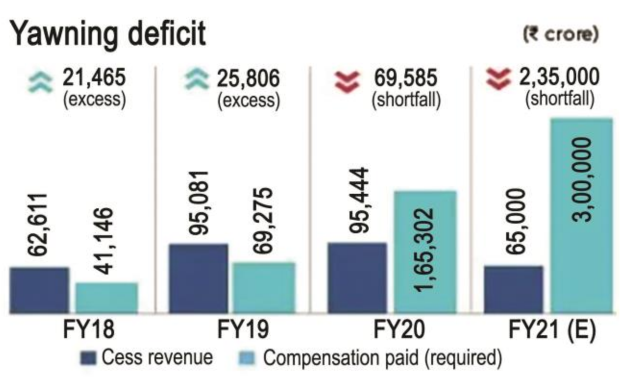
Anti-profiteering framework: Need to evolve clear guidelines on anti-profiteering mechanism.

Shortfall in GST Compensation Cess: Almost 21 states still depend upon Centre for the GST compensation.

Lack of Revenue Neutrality: A change in tax structure can be said to be revenue neutral if the modified tax is able to realize revenue comparable to the original tax regime. In this sense, the much-needed revenue neutrality of GST stands compromised. The Share of General Government's revenue from taxes subsumed under GST was 6.3% of GDP in 2016-17. However, the collections under GST was 5.7% of GDP in 2018-19 and 5.6% in 2019-20.

►UNDERSTANDING THE CONTROVERSY OVER GST COMPENSATION MECHANISM

Compensation cess is levied on luxury and sin goods, and the proceeds are used to compensate states for any loss they incur within the first five years of GST implementation (i.e., until end of 2022). According to the GST Act, States and UTs with Assemblies are guaranteed compensation if the GST revenue growth is less than 14 per cent. The amount is paid bi-monthly.



<u>Shortfall in GST Compensation:</u> In 2020-21, the Centre collected GST compensation cess of around Rs 65,000 crores against the compensation requirement of Rs 3 lakh crores. However, this entire shortfall of Rs 2.35 lakh crores was not due to GST implementation alone, it was also on account of COVID-19. Accordingly, the Centre had estimated that out of total shortfall of Rs 2.35 lakh crores, only Rs 1.10 Lakh crores is on account of GST implementation due to rate cut or lower tax returns, the rest is on account of COVID-19.

Accordingly, the Centre had asked the states to borrow this shortfall amount either from the RBI or the market. The centre had assured that the borrowed money would be paid by extending the GST compensation cess beyond 2022.

ARGUMENTS OF THE STATES

- Centre should compensate the States from the Cess that it collects from other taxes such as Education and Health Cess, Road and Infrastructure cess imposed on petroleum products etc.
- Centre should tap into Consolidated Fund of India to compensate the States.
- Centre should itself borrow money in order to compensate the States.

HOW WAS THE ISSUE RESOLVED?

The Central Government borrowed Rs 1.10 lakh crores through a special window from the RBI to compensate the states. This would be passed on to the states as a loan and paid back by extending the GST compensation Cess beyond the mandated period of 5 years. This will not have any impact on the fiscal deficit of the Government of India. The amounts will be reflected as the capital receipts of the State Governments and as part of financing of its respective fiscal deficits.

LESSONS TO BE LEARNT FROM THE CONTROVERSY

Such kind of issues between the Centre and States likely to arise in the future as well. Some of the steps that need to be taken include:

1. **Handling Disputes:** The GST Council must devise a mechanism to handle such disputes in future. This could either be through setting up of GST Dispute Settlement authority (as provided under 101st Constitutional amendment) or referring the issue to ministerial panels or committees to evolve consensus on contentious issues.
2. Set up **Fiscal Council** to provide better economic forecasts.

►ANTI-PROFITEERING MECHANISM AND CONSTRAINTS

ABOUT NATIONAL ANTI-PROFITEERING AUTHORITY

Section 171 of the CGST act deals with profiteering. It empowers the central Government to constitute authority to check illegal profiteering. Accordingly, the Union Cabinet has constituted National Anti-Profiteering Authority (NAA) in 2017. The tenure of National Anti-profiteering Authority (NAA) was due to end by 30 November 2019. Initially, it got extension of 2 years until end of November 2021. **Recently, it has got extension of another year**.

MECHANISM OF WORKING

When the NAA certify that there is anti-profiteering in a specific case, it can order the concerned firm to reduce its prices or return the undue benefit availed by it along with interest to the recipient of the goods or services. If the undue benefit cannot be passed on to the consumer, it can be ordered to be deposited in the Consumer Welfare Fund. In extreme cases, the NAA can impose a penalty on the defaulting business entity and even order the cancellation of its registration under GST.

PROBLEMS WITH THE PRESENT ANTI-PROFITEERING FRAMEWORK

Absence of Methodology to ascertain Profiteering: Rule 126 of the Central Goods and Services Tax Rules, 2017, mandates that National Anti-profiteering Authority (NAA) must evolve a methodology to deal with anti-profiteering issues. However, the NAA has failed to prescribe the methodology leading to arbitrariness and contradictions in Anti-Profiteering Framework.

Only Mode prescribed for passing on the Benefit: Present, the companies are compulsorily required to reduce the prices of their products whenever the GST rates are reduced. If the companies use any other method to pass on the benefit of reduced GST rates, it still is considered as Profiteering. Now, for example, the companies can decide to pass on the benefit in the form of increased grammage i.e., providing higher quantity of commodity at the same price.

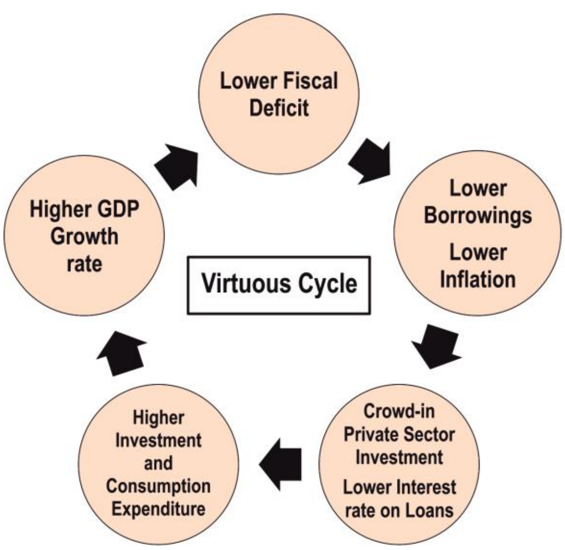
Other Factors not considered: Despite reduction in the GST rates, the cost of manufacturing of commodities (Raw materials, Labour Cost etc) may have been increased. However, these factors are not considered to ascertain profiteering.

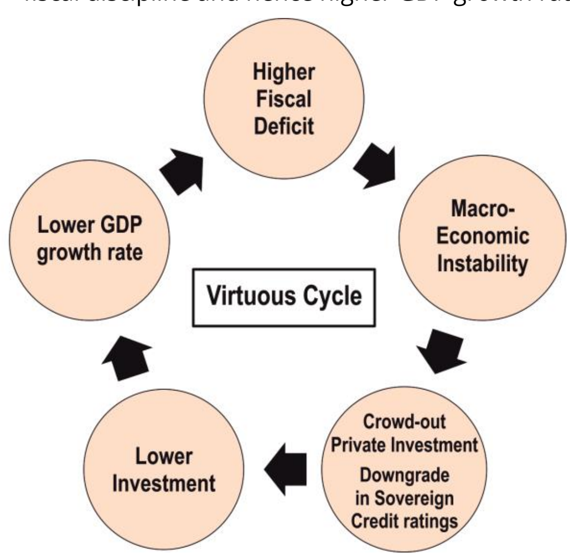
Absence of Appellate Body: There is no appellate mechanism or authority prescribed against the order of National Anti-profiteering Authority (NAA). Thus, only remedy for a person dissatisfied with the NAA order is to approach the High Court through Writ Petition.

►LIMITS ON FISCAL DEFICIT- A CONSTRAINT ON BOOSTING ECONOMIC GROWTH?

The FRBM Act, 2003 requires the Government to maintain FD target of 3% to ensure fiscal discipline. However, during exceptional times such as Covid-19, such reasonable targets can force the government to adopt pro-cyclical fiscal policy and hence prolong economic revival.

As seen below, reasonable restriction on FD is extremely critical to promote higher Tax-GDP ratio, rationalization of expenditure, ensure inter-generational equity and fiscal discipline and hence higher GDP growth rate.





However, during abnormal times such as Covid-19, the Government needs to adopt counter cyclical fiscal policy and hence such restrictions on FD can hinder economic revival. Thus, even though, increase in Fiscal deficit can have long term adverse consequences, the current economic scenario requires us to deviate from FD targets on account of following reasons:

Unprecedented Times: The Covid-19 has led to twin shocks leading to a record GDP contraction of -7.5% in 2020-21. Deviation of 0.5% in FD which is allowed under FRBM act is not sufficient. Unprecedented times call for unprecedented measures.

Sticking to FD Limit- Counter-Productive: Sticking to FD Limit → Cutting down on Expenditure and Increasing the tax rates → Decline in Investment and Consumption expenditure → Decline in Employment → Decline in GDP growth rates and Income levels (Pro-cyclical Fiscal Policy)

Key to Economic Revival: Both Investment and Consumption expenditure affected and unlikely to increase due to economic uncertainty. Hence, need for increasing Government expenditure (GFCE).

Increase in GFCE → Creation of Infrastructure → Crowd-in Private sector Investment → Boost Demand in the economy → Address Twin Shocks → Boost GDP growth rate.

HIGHER FD- NOT A MATTER OF CONCERN

- Lower absolute debt
- Negative IRGD- Higher Debt Sustainability
- Long term maturity profile of India's Debt
- Adequacy of forex Reserves
- Downgrade in Sovereign Credit Ratings--> Minimal impact on India's GDP growth rate

Hence, as rightly pointed out by Economic Survey 2020-21, the Government need not be worried out higher FD to provide fiscal stimulus to deal with present economic scenario. However, at the same time, there is a need to ensure higher quality of Fiscal deficit by increasing the share of Capital expenditure and reducing share of revenue expenditure. Necessary amendments would have to be introduced in the FRBM Act, 2003.

►DISINVESTMENT POLICY IN INDIA- PRIVATISATION AND WEALTH CREATION

EVOLUTION OF DISINVESTMENT POLICY

The liberalization reforms undertaken in 1991 ushered in an increased demand for privatization/ disinvestment of PSUs.

- **First Phase:** Sale of minority stake in bundles through auction.
- **Second Phase:** Separate Sale of each PSU
- **Third Phase**:
  - Strategic Disinvestment- Sale of substantial portion of Government shareholding in identified Central PSEs (CPSEs) up to 50 per cent or more, along with transfer of management control.
  - Launch of exchange traded funds (ETFs) - an equity instrument that tracks a particular index.
  - Monetization of select assets of CPSEs.

STRATEGIC PUBLIC SECTOR ENTERPRISE POLICY

Under the new "Public Sector Enterprise" policy, various sectors will be classified as strategic and non-strategic sectors. The policy has identified 4 sectors as strategic sectors: i) Atomic energy, Space and Defence ii) Transport and Telecommunications iii) Power, Petroleum, Coal and other minerals iv) Banking, Insurance and financial services.

In strategic sectors, there will be bare minimum presence of the public sector enterprises. The remaining CPSEs in the strategic sector will be privatised or merged with other CPSEs. In non-strategic sectors, CPSEs will be privatised, otherwise shall be closed.

BENEFITS OF PRIVATISATION

- Strong positive effect of labour productivity and overall efficiency of PSUs in India: Post-privatization, the performance of the privatized entity improves significantly in terms of net worth, net profit, return on assets (ROA), return on equity (ROE), gross revenue
- Improved capital allocation and economic efficiency
- Cost reductions
- Privatisation has multiplier effect on other sectors of the economy.
- Enhanced Competitiveness
- Professionalism in management of CPSEs

WAY FORWARD

Privatisation or disinvestment program should aim at maximisation of Government's equity stake value. The learning from the experience of Temasek Holdings Company in Singapore may be useful in this context. The Government can transfer its stake in the listed CPSEs to a separate corporate Entity. This entity would be managed by an independent board and would be mandated to divest the Government stake in these CPSEs over a period of time. This will lend professionalism and autonomy to the disinvestment program.

►EQUALISATION LEVY

RATIONALE BEHIND INTRODUCTION OF DIGITAL TAXES

The existing tax norms have been framed keeping in mind the brick and mortar business models. However, these norms are not suitable to regulate online services. With rapid advancements in the field of big data and AI, the digital companies have been able to harness the user generated data enabling them to earn huge revenues through digital advertisements. In spite of the fact that these companies earn revenue by harnessing the data generated in a particular country, these companies are not obliged to pay adequate taxes in source country. Hence, Equalization Levy has been introduced in the Union Budget 2016 in order to bring such Internet based companies within the ambit of tax.

DETAILS ABOUT EQUALIZATION LEVY

The equalization levy of 6% is applicable to the income accruing to a foreign E-commerce company which is not a resident of India. Any person or entity in India which makes a payment exceeding Rs 1 lakh in a financial year to a non-resident technology company (such as Google) for some B2B (Business to Business) transactions needs to withhold 6% of the gross amount to be paid as equalization levy.

The two conditions to be met to be liable to equalization levy:

- The payment should be made to a non-resident service provider;
- The annual payment made to the service provider should exceed Rs. 1 lakh in one financial year.

EXPANSION OF EQUALISATION LEVY IN UNION BUDGET 2020

The Finance Act, 2020 has inserted a provision to impose Equalisation levy of 2% on the revenues generated through the online sale of goods and services by non-resident e-commerce companies. The Equalisation levy would be applicable only if the aggregate revenues for a non-resident e-commerce companies exceed a threshold of Rs 2 crores.

Applicability: Payment made by Indians to the Foreign Companies non-resident in India		
	Earlier Regime	**Present Regime post 2020**
Companies Covered	Foreign Companies which provide Digital Advertisements such as Google, Facebook, Twitter etc.	All the Foreign Companies with an annual turnover of Rs 2 crores and above. Amazon, Netflix, Trivago etc.
Goods and Services covered	Only Digital Advertisements	Payment for Digital Advertisements to Foreign Companies + Payment for buying Goods and Services online. Applicable to companies such as Amazon, Flipkart, Netflix, Trivago etc.
Tax Rate	6% of the total payment made for Digital Ads	**Digital Ads:** 6% of the total payment + **Payment for buying Goods and Services online:** *2%* of the payment received.

The new modification introduced in the Finance Act, 2020 has been opposed by the foreign e-commerce companies on account of following reasons:

WIDER APPLICATION OF TAXATION REGIME: Earlier, the Equalisation levy was applicable only on the advertising revenue of non-resident companies. Now, this would be applicable on the all the revenue earned through the online sale of goods and services by non-resident e-commerce companies. The scope of the application of Equalisation levy is so wide that it will bring almost all the foreign based technological companies under the tax bracket. This includes e-commerce companies such as Amazon; online streaming/ content service providers such as Netflix, Amazon Prime; online travel aggregators such as Trivago, TripAdvisor etc.

HIGHER TAX BURDEN: Earlier equalisation levy was applicable only on B2B transactions. But now, the new equalisation levy would be applicable on every transaction undertaken by non-resident e-commerce companies which includes both B2B as well as B2C transactions.

LACK OF DISTINCTION BETWEEN DIGITAL SERVICES AND GOODS/SERVICES PROVIDED THROUGH DIGITAL

MODE: If you watch a movie online on a digital platform such as Amazon Prime, Netflix etc, then it can be considered as Digital service. On the other hand, if you book a movie ticket online through a platform (such as Book My Show) and then watch it in a multiplex, then it cannot be considered as completely Digital Service. Here, the booking platform is providing you with the service of booking a movie ticket through the Digital mode. It is not providing movie as a Digital service.

Hence, such booking platforms are quite distinct from streaming services such as Amazon Prime, Netflix etc.

Accordingly, some of the companies have pointed out that it would be unfair to tax the companies that provide Goods/services through Digital mode on par with companies that provide Digital Services. Hence, even though, the Government's idea is to tax e-commerce transactions, but it may end up taxing even those transactions where Internet is just a medium.

►CONCERNS OVER DIGITAL TAXATION

Most of the Internet-based companies such as Google, Apple, Facebook etc. evade taxes through Base Erosion and Profit Shifting (BEPS) strategies such as Treaty Shopping, Round Tripping etc. Hence, countries such as India (Equalisation levy) and France (GAFA Tax) have imposed digital taxes to bring such MNCs within the ambit of tax. In this regard, an international debate is occurring over the global taxing rights of revenues and profits earned by multinational corporations (MNCs)

CHALLENGES OF TAXATION IN DIGITAL ECONOMY

In the Digital Economy, a main concern and potential source of disagreement between countries is the question of where value is created. While countries agree that a multinational's profits should be taxed in the jurisdictions in which it creates value, some countries argue that the value for companies in the Digital Economy derives from factors such as user participation or user location.

HOW DO DIGITAL COMPANIES AVOID TAXATION?

1. Eliminating or reducing tax in the market country
   - Avoiding taxable presence
   - Minimising income allocable to functions, assets and risks in market
   - Maximising deductions in market jurisdictions
2. Avoiding withholding tax
3. Eliminating or reducing tax in the intermediate country (Tax heavens)

INSTANCES OF DIGITAL LEVIES BY COUNTRIES

1. GAFA tax imposed by France (Digital Service Tax)
2. Digital Equalisation Levy imposed by India
3. Australia's mandate for platforms such as Google and Facebook to pay original news creators
4. USA has opposed these instances of taxation. Arguing that taxing internet giants amount to protectionism.

STEPS TAKEN TO COUNTER BEPS

OECD BEPS Project: In order to combat risks associated with BEPS and to improve the transparency, the OECD has come out with 15-point action plan based on the recommendations of G-20.

Ratification by India of the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting: The Multilateral Convention/MLI is an outcome of the OECD / G20 Project to tackle Base Erosion and Profit Shifting (the "BEPS Project"). The MLI will modify India's tax treaties to curb revenue loss through treaty abuse and base erosion and profit shifting strategies by ensuring that profits are taxed where substantive economic activities generating the profits are carried out.

►DISASTER RISK INSURANCE FINANCING

INDIA'S VULNERABILITY TO DISASTERS: India is very vulnerable to natural hazards because of its unique geo-climatic conditions. Almost 85% of the country is vulnerable to single or multiple disasters and about 57% of its area lies in high seismic zones. Approximately 40 million hectares (12%) of the country's land area is prone to flood, about 8% of the total land mass is vulnerable to cyclone and 68% of the area is susceptible to drought.

IMPACT OF DISASTERS: According to the Global Climate Risk Index published by Global Environmental thinktank 'German Watch", India is the 5th most vulnerable country. The economic losses in India accounted for around $13,789 million, the 4th highest in the world.

PROBLEMS WITH DISASTER FINANCING IN INDIA

Insufficient Funds: The large events like Kerala Flood, Chennai Flood or Cyclone Fani clearly show that one cannot entirely depend on Government's support.

Over- reliance on Government's funding: Less of private sector investment in providing relief and rehabilitation, construction of infrastructure projects.

More focus on Relief and Rehabilitation: less focus on Disaster Mitigation

Less emphasis on bringing about behavioural changes in the people- Discouraging people from building houses in flood plain areas; Encouraging people to build disaster resilient infrastructure etc.

DISASTER RISK INSURANCE- RATIONALE AND BENEFITS

Rationale: The Government of India has launched quite a few social protection schemes leveraging on insurance solutions like Pradhan Mantri Jan Arogya Yojana (PM-JAY), Pradhan Mantri Fasal Bima Yojana (PMFBY). On similar lines, we need to have insurance schemes to cover protection against disasters such as Floods, Droughts, Earthquakes, landslides etc.

DESIGN OF THE DISASTER RISK INSURANCE

Coverage of Disasters: Insurance against all types of Disasters in India.

Applicability: Government, Private Sector and Household sector. (For the poor households, Insurance premium should be entirely paid by the Government)

Working Mechanism: Pay the premium to an insurance company → Get Insured for losses such as Property damage, business interruption, livelihood costs, disability, loss of lives etc → Insurance mechanism gets trigged in event of Disaster → Insurance company pays for the loss → Reduces the financial burden.

BENEFITS

- Reliable and timely financial relief for recovery of livelihoods and reconstruction.
- prevent people from falling into poverty
- Diversification of risk from the Government towards the private sector
- Amount of premium depends upon the risk involved →Higher premium for higher risk such as construction of houses in flood prone areas→ Encourage people to construct disaster Resilient houses in safe zones.
- States limited capacity to deal with Disasters → Allocate finances meant for the purpose of development towards Relief and Rehabilitation → Less funds available for development → Growth Gap.

IMPORTANT CASE STUDIES

Disaster Risk Financing and Insurance Program (DRFIP): World bank funded Program; Helps the governments to improve the disaster risk insurance in close coordination with the Private sector.

Southeast Asian Disaster Risk Insurance Facility (2018): Cambodia, Indonesia, Lao PDR, Myanmar, Singapore, and Japan agreed to establish SEADRIF as a trust to own a general insurance company in Singapore.

►RETROSPECTIVE AMENDMENT TO TAXATION

RETROSPECTIVE TAXATION AND RECENT AMENDMENT BILL

The 2012 Finance Act had amended the IT Act to impose tax on the foreign companies on a retrospective basis. Under the act, if a company is registered outside India, its shares will be deemed to be situated in India if they derive their value substantially from the assets located in India. As a result, the persons who sold such shares of foreign companies before the enactment of the Act (i.e., May 28, 2012) also became liable to pay tax on the income earned from such sale.

TAXATION LAWS (AMENDMENT) BILL 2021

Now, the Government has decided to do away with the retrospective amendment. Salient features:

- Demand for the payment of the taxes on the transactions which were done before May 28, 2012, would be withdrawn. Tax collected on a retrospective basis would be refunded back to the companies.
- No further demand for taxes on the transactions which were done before May 28, 2012.
- Above provisions would be applicable if the company withdraws the case against the Government.

RATIONALE FOR RETROSPECTIVE TAXATION

Prevent Revenue loss: Foreign companies such as Vodafone have used loopholes in the tax laws to avoid paying taxes. For example, in case of Vodafone, the transaction was deliberately carried out in Cayman Islands (and not in India) simply to avoid payment of capital gains tax which amounted to Rs 14000 crores. According to the State of Tax Justice report of 2020 notes that India loses over $10 billion in tax revenue.

Undo the decision of Supreme Court: In the Vodafone case, the SC had ruled that IT Act does not empower the tax authorities to demand tax from Vodafone and accordingly ruled in the favour of Vodafone. The retrospective amendment was brought to undo the decision of the Supreme Court.

No International Agreements on Tax Avoidance: In absence of international agreements, Retrospective amendment to taxation can be considered as one of the fair means to collect revenue from MNCs.

Prevent Tax avoidance by MNCs in future: The retrospective amendment can also discourage the MNCs from carrying out transactions in BEPS and hence increase tax revenue for the government.

PROBLEMS WITH RETROSPECTIVE AMENDMENT

Hurt Foreign Investment: Introduction of Retrospective amendment to taxation is well within the powers of the Parliament. However, such amendments lead to greater uncertainty in taxation and hence discourage foreign Investment.

Increase in Litigations: Companies such as Vodafone and Cairn have dragged the Indian Government before the international arbitration tribunals under the Bilateral Investment treaties (BITs). The orders issued by these arbitration tribunals have not only gone against retrospective amendment, but they have also affected our global image as reliable investment destination.

Revenue Neutral: The intention behind the retrospective amendment was to enhance the revenue collection. However, the revenue collection under the amendments was zero, and losses in terms of FDI and FPI was substantial. Hence, retrospective amendment was counterproductive.

Economic Policy Uncertainty: Economic Survey 2018-19 highlights the direct co-relation between higher economic policy uncertainty and lower GDP growth rates in India. To become $ 5 trillion economy, there is a need for pro-business policies that foster ethical wealth creation.

WAY FORWARD

Undoubtedly, the Government has sovereign rights to tax the companies in whichever way it would want to, but while doing so, it must keep in mind the rights of the companies as well. The companies should be given the rights of safe, secure, stable and predictable legal environment. Such an environment is not only necessary to encourage foreign investment, but it is also crucial to uphold rule of law.

Hence, doing away with the retrospective taxation is a well-intended and pragmatic move which would ensure to keep Indian economy more open, transparent and rules based.

SECTION-7

INDUSTRIAL POLICY AND LPG

Previous Year Questions

SUB- THEME	YEAR	QUESTION
Industrial Policy	2013	Discuss the impact of FDI entry into multi-trade retail sector on supply chain management in commodity trade pattern of the economy.
		Though India allowed foreign direct investment (FDI) in what is called multi brand retail through joint venture route in September 2012, the FDI even after a year has not picket up. Discuss the reasons.
	2014	Foreign direct investment in the defence sector is now said to be liberalised. What influence this is expected to have on Indian defence and economy in the short and long run?
		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 the huge growth of services vis-a-vis industry in the country? Can India become a developed country without a strong industrial base?
	2015	There is a clear acknowledgement that Special Economic Zones (SEZs) are a tool of industrial development, manufacturing and exports. Recognizing this potential, the whole instrumentality of SEZs requires augmentation. Discuss the issues plaguing the success of SEZs with respect to taxation, governing laws and administration.
	2017	"Industrial growth rate has lagged behind in the overall growth of Gross-Domestic-Product (GDP) in the post-reform period" Give reasons. How far the recent changes in Industrial Policy are capable of increasing the industrial growth rate?

Economic Liberalisation	2013	Examine the impact of liberalization on companies owned by Indian. Are they competing with the MNCs satisfactorily?
	2016	How globalization has led to the reduction of employment in the formal sector of the Indian economy? Is increased informalization detrimental to the development of the country?
International Trade	2018	How would the recent phenomena of protectionism and currency manipulations in world trade affect macroeconomic stability of India?

►FAILURE OF MANUFACTURING SECTOR- REASONS AND STRATEGIES NEEDED

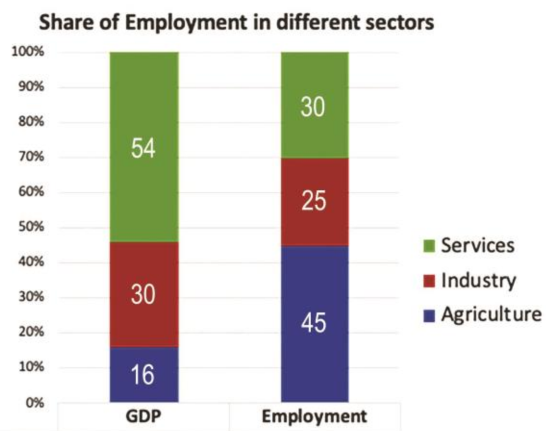
Countries across the World have relied upon 3 modes of Escape- Geography, Geology and Jeans to promote Economic growth and development. Countries such as Switzerland, Mauritius etc. have focused on promotion of Tourism (Geography). Countries such as Saudi Arabia, Australia, Canada etc. have relied on their rich natural resources (Geology). Countries such as Singapore, Thailand, South Korea, China etc. have relied on low-cost manufacturing by making optimum utilization of their human resources (Jeans).

In spite of having world's second largest Population, India has failed to capitalize on Jeans and promote low-cost manufacturing.

In this context, the Indian manufacturing sector exhibits many peculiarities: first, it contributes small and stagnant share to GDP (17%) ; second, its composition is more skewed towards skill and capital intensive activities; third, only a small share of employment in manufacturing is in organized manufacturing (the unorganized manufacturing sector accounted for almost 70 per cent of total manufacturing employment); and fourth, employment is heavily concentrated in small firms.

GOVERNMENT INITIATIVES TO BOOST MANUFACTURING

- **Make in India Action Plan**: Increasing the manufacturing sector's contribution to 25 per cent of GDP by 2020
- **National Manufacturing Policy 2011**: Create 100 million additional jobs by 2022
- **Infrastructure:** National Investment and Manufacturing Zones (NIMZs) , Special Economic Zones (SEZs), Industrial Corridors, Dedicated Freight Corridors, Sagarmala, Bharatmala etc.
- **Policy Initiatives:** Recent changes in definition of MSMEs; Consolidation of labour laws into 4 Labour Codes; Reduction in Corporate tax rates; Increase in FDI limits on various sectors such as Defence, Public Procurement Policy etc.
- **Aatma Nirbhar Bharat**- Vocal for Local and protection to domestic Industries through tariffs.
- **Schemes:** Production Linked Incentive (PLI) Scheme, Start-up India, Stand-up India, MUDRA, Schemes for development of MSMEs etc- National Manufacturing Competitiveness Program (NMCP), Zero Defect, Zero Effect etc.



	GDP	Employment
Services	54	30
Industry	30	25
Agriculture	16	45

ANALYSIS OF THE "MAKE IN INDIA" CAMPAIGN

The success of the "Make in India" campaign can be analyzed from three important economic parameters- Investment rates, Output Growth and employment growth.

Investment rates: There has been decline in the overall capital investments in the manufacturing sector in the last 5 years. The investment rate within the Indian Economy has reduced from 31.3% in 2013-14 to 28.6% in 2017-18.

Output Growth: The output growth of the manufacturing sector can be analyzed by looking at high frequency indicators such as Index of Industrial production. The IIP has registered double-digit growth rates only on two occasions between 2012 to 2019. The share of Manufacturing sector to GDP has also remained stagnant.

Employment Growth: The Unemployment within India has increased to 45-year high of 6.1% as highlighted by PLFS Report.

REASONS FOR THE FAILURE OF 'MAKE IN INDIA'

Poor Condition of the Financial Sector: The NPAs of the Indian banks and liquidity crunch faced by the NBFCs has led to reduced credit creation within the Indian Economy.

Archaic labour laws: The archaic and outdated labour laws have led to higher compliance burden on the firms and disincentivized the private sector from investing in the manufacturing sector.

Problem of Missing Middle: The Manufacturing sector is basically dominated by a large number of small enterprises and a relatively less number of large scale manufacturing enterprises. There is almost near absence of mid-sized firms. Such a peculiar scenario is referred to as "Problem of Missing Middle". This is basically attributed to the Government incentive structure and policies.

Skilled Human Resources: As per census 2011, India has almost 53% of the population in the working-age group. However, in order to optimally utilize the demographic dividend, we need skilled human resources. The lack of availability of skilled human resources is considered to be a constraint for the manufacturing sector.

Logistics cost: The Logistics cost account for almost 12-14% of India's GDP as compared to 8-9% in other countries.

Impact of FTAs: The FTAs signed by India with the developed economies such as Japan, South Korea etc. have led to import of cheaper foreign goods and hence adversely impacted the domestic manufacturing.

High Taxation: The Corporate tax rates within India was considered to be at least 50% higher as compared to other emerging economies. It was only recently that the Government has decided to reduce the corporate tax rates and bring them on par with the tax rates prevailing in other countries.

Technology adoption: The adoption of new technologies like artificial intelligence, data analytics, machine-to-machine communications, robotics and related technologies, collectively called "Industry 4.0", are a bigger challenge for SMEs than for organized large-scale manufacturing.

Other important reasons that could be attributed to the failure of "Make in India" are **cumbersome land acquisition procedure, poor ease of doing business, greater amount of policy uncertainty, poor infrastructure** etc.

BROAD CONTOURS OF NEW MANUFACTURING POLICY

- **Focus on Coastal Economic zones (CEZs):** Port-led Industrialisation by fast tracking implementation of CEZs. Setting up of Coastal SEZs in China such as Shenzhen enabled it to attract manufacturing companies from Taiwan and Hongkong; Need to replicate the same to attract the companies from China now.
- **Focus on Sunrise Sectors** based on new-age technologies such as blockchain, robotics, machine learning, big data, AI etc to leverage opportunities created by Industrial Revolution 4.0.
- **Boosting Innovation through Start-Ups:** Conducive ecosystem for nurturing and promoting start-ups through access to finance, handholding, tax incentives, access to market etc.
- **Attracting foreign Investment though Plug and Play Model**: Under the plug-and-play model, the investors are provided with land at affordable cost with all the necessary pre-clearances including Environmental clearances. It would provide in-built office spaces and all the basic facilities such as Electricity, water etc. One of the biggest advantages of such a model is that it kickstarts the production as early as possible without any hurdles. Some of the States such as Maharashtra, Haryana etc. have decided to adopt such a model to boost foreign Investment. This model needs to be replicated by the other states as well.
- **Facilitate Investment:** Reforms in Public Sector Banks to enhance credit creation; Strengthen corporate Bond market; Improve financial position of NBFCs.
- Government's financial support to manufacturing **clusters** and provide single window clearances to entrepreneurs and investors.
- Extend **Product Linked Incentive (PLI) scheme** to other sectors.
- Focus on **Quality standards to boost exports:** Task the Bureau of Indian Standards and Quality Council of

India with assessing the improvements in standards and productivity required to achieve global standards.

- **Renegotiate FTAs** to India's advantage and address inverted duty structure.
- **Skilling India:** Greater connect between government-industry-academia is required to identify the changing requirements in manufacturing and prepare an employable workforce. In the context of employability of engineers, there is a need for thorough review of standards of engineering education and its linkages with industry.

►CRITICAL ANALYSIS OF THE PLI SCHEME

To become $ 5 trillion economy and realize the vision of Aatma Nirbhar Bharat, there is a need to enhance investment in the Manufacturing sector. Hence, as part of Aatma Nirbhar Bharat Package, the Government has approved PLI schemes for almost 13 sectors such as Mobile Manufacturing, Pharmaceutical Industry, Textile, Automobiles, Specialty steel, Solar PV Modules etc.

DETAILS ABOUT PLI SCHEME

Objective: Boost domestic manufacturing and attract large investments in domestic manufacturing

Strategy: Offer companies incentives on incremental sales of products manufactured in India. The scheme also invites foreign companies to set up units in India and avail benefits.

Incentives: Extend an incentive of 4% to 7% on incremental sales (over base year of 2019-20) of goods manufactured in India for a period of 5 years.

Eligibility: Incentives are provided under the scheme to only those companies which cross the threshold level in terms of incremental sale of Manufactured Goods and Incremental investment over the base year.

Tenure of Scheme: 5 years

BENEFITS OF PLI SCHEME

The PLI scheme would help us achieve ***import substitution, export promotion, cost-competitive and efficient manufacturing, economies of scale, increased contribution in global value chains and higher market share in the champion sectors***.

1. **Linking Incentives to Output:** Unlike previous schemes which focusses on Inputs (such as increase in customs duty under the Phased Manufacturing Programme), the PLI scheme focusses on outputs as it encourages the companies to increase both investment and production of Goods.
2. **Outcome-based and result-oriented:** This means that incentives will be disbursed only after production has taken place in the country. ***The PLI scheme is likely to boost India's manufacturing output by Rs.37 lakh crores crore (US$ 520 billion) in five years.***
3. **Easy to Administer:** The incentives are available based upon fulfilment of objective criteria and hence easy to implement.
4. **Creating 'champions' to integrate into Global Value Chains (GVCs):** The scheme focuses on size and scale by selecting those players who can deliver on volumes. This would enable nurturing of lead firms which can help set up Global Value chains (GVCs)
5. **Technology Adoption:** PLI Scheme focusses more on incentivising adoption of advanced technology. For example, PLI scheme for Automobile sector focusses on manufacturing of advanced Batteries and Electric Vehicles. This would encourage industries to give up obsolete technology, adopt cutting edge technology and become globally competitive.
6. **Linkages with MSMEs**: PLI scheme will establish backward linkages with the MSME sector which in turn will lead to more inclusive growth and create huge employment opportunities.
7. **Ensure Self-Reliance**: Even today, India is critically dependent on import of critical products such as Telecom, Active Pharmaceutical Ingredients (APIs), Mobile phones, Electronic Goods, Advanced Batteries etc. By boosting production of these critical goods, the scheme not only ensures self-reliance, but also positions India to become major exporter.
8. **Employment Creation:** Generate large-scale employment by incentivizing the development of traditional, labour-intensive sectors like food processing and textiles.
9. **Attract foreign companies exiting China:** Presently, very few foreign companies which are exiting from China have established their base in India. These companies are establishing their bases in other economies such as Vietnam. PLI Scheme would help us attract these foreign companies.

CHALLENGES

Higher Manufacturing Cost: Manufacturing sector has remained stagnant due to poor access to factors of production such as Land, capital, poor labour productivity, poor ease in doing business, higher logistics cost etc. Because of these factors, the cost of manufacturing is quite high in comparison to our competitors. So, despite PLI scheme, foreign companies may prefer other investment destinations such as China, Vietnam etc.

May Go against Domestic Companies: Incentives are uniformly applicable to both domestic companies and foreign companies incorporated in India. Deep pocketed foreign companies may be able to reap higher benefits in comparison to domestic companies and thus domestic companies may get adversely affected.

Limit on Incentives: The incentives given to a company is based on the incremental production. That is, greater the production, the higher the incentives. However, the incentives cannot be claimed beyond the financial outlay proposed by the Government. Hence, an over-performing company may not be reap the benefits under the scheme in absolute terms.

Limited Applicability:

- Applicable to only certain sectors. Important labour-intensive sectors such as Leather have been left out.
- Applicable to only selected few big companies. For example, only 10 companies have been chosen for mobile phone manufacturing.

Promote rent-seeking tendencies among private sector: Experience of the pre-liberalization period shows that schemes such as these are prone to create rent seeking tendencies among the private sectors. For example, foreign companies such as Samsung, Wistron and Foxconn have already approached the government to delay the starting of the first-year conditions on additional sales and investments.

Inward Oriented and Protectionist Policies: To ensure success of PLI scheme, the Government has increased customs duty on number of goods such as electronic and electric goods, Electric cars etc. Protection to selected industries both through subsidies and customs duties would lead to the problem of protectionism and reduction in competition.

WAY FORWARD

Subsidies and incentives can be a game-changer only when we are able to address structural problems of the manufacturing sector. PLI is a game-changer to transform the manufacturing landscape of the country. However, its success hinges on supporting reforms that realise the full potential of the economy.

►PERFORMANCE ANALYSIS OF SPECIAL ECONOMIC ZONES (SEZS) IN INDIA

WHAT ARE SPECIAL ECONOMIC ZONES?: SEZs is a geographical area that has economic laws different for a country's general economic laws. They are delineated duty-free enclaves and shall be deemed to be foreign territory for the purpose of trade, duties and tariffs. India enacted **Special Economic Zones, 2005 Act** which provided for the establishment, development and management of the SEZs. The SEZ law also provides for establishment of International Financial Services Centre and Free Trade and Warehousing Zones. GIFT city in Gujarat has been established under this law.

OBJECTIVES

- Generation of additional economic activity
- Promotion of exports of goods and services
- Promotion of investment from domestic and foreign sources
- Creation of employment opportunities
- Development of infrastructure facilities
- Provide globally competitive and hassle free environment for companies engaged in exports for goods and services

BENEFITS TO SEZS INCLUDE

- Tax holidays
- Exemption from import duties
- Single window clearance for central and state approvals

EVALUATION OF SEZS IN INDIA

Department of Commerce has granted approval for setting up of 417 SEZs, out of which 349 have been notified. The exports from SEZs over the past 14 years (2005-06 to 2018-19) has increased by over 30 times. Almost 20 million employment opportunities have been created in SEZs since 2006.

- Though SEZs were envisaged to promote manufacturing led exports, however, SEZs policy has been leveraged well by companies in the Services sector. Manufacturing sector has been unable to replicate similar export led growth.
- Regional disparity
- Value of exports from SEZs have been rising.
- Investments in SEZs have also been rising though its rate of growth has been decelerating.
- Complexity in undertaking domestic and international business through same units impacting viability of SEZs for manufacturing.
- Uncertainty in government policies ex. Withdrawal of Minimum Alternate Tax and Dividend Distribution tax exemptions, announcement of sunset date etc.

- Multiple regulatory stakeholders (Direct tax, indirect tax, exchange controls, State Governments and SEZ authorities) need not necessarily aligned at all times.
- Procedural delays and infrastructural bottlenecks.

'SEZ EXPERIENCE IN OTHER COUNTRIES

China: Focussed on enabling a limited number of zones, large size to achieve agglomeration benefits and maintained long-term focus on these zones.

RECOMMENDATIONS OF BABA KALYANI COMMITTEE

The committee advocated for a strategic shift in purpose and principles of the SEZs in India with the objective of moving from ***islands of exports to catalysts of economic and employment growth***.

Framework shift from export growth to broad-based Employment and Economic Growth (Employment and Economic Enclaves-3Es): SEZs to be renamed as 3 E's- Employment and Economic Enclaves. Today, SEZs are viewed as zones promoting only exporters with special privileges; change in nomenclature will bring together all the categories of Investors that enable economic activity and boost employment creation.

- Promote Investment that create economic activities and job creation and do not limit to promoting exports.
- Quantum of Incentives to be based on certain parameters and delinked from exports
    - Investment committed
    - Job Creation
    - Inclusivity- Jobs for Women
    - Value Addition
    - Technology Adoption
    - Priority Industry

Shift from supply driven to demand driven approach

- Beyond Private sector driven enclaves, the Government could focus on few but large zones as future zones of excellence (Similar to Institutes of eminence in Education sector)
- Develop SEZs close to ports
- Focus on developing SEZs in key manufacturing hubs such as Industrial Corridors etc.
- Priority focus on certain SEZs so that they become successful.

Shift from trade competitiveness to manufacturing competitiveness: Government should increase the competitiveness of the 3Es by enabling link infrastructure by funding high speed multi modal connectivity, business services and utility infrastructure

Enabling framework for Ease of Doing Business (EoDB): Integrated online portal for new investments, easier operational requirements and exits related matters.

Enhance competitiveness by enabling ecosystem development by funding high speed multi modal connectivity, business services and utility infrastructure. Critical to provide support to create high quality infrastructure either within or linked to the zones eg. High Speed Rail, Express roadways, Passenger/Cargo airports, shipping ports, warehouses etc.

Promote integrated industrial and urban development- walk to work zones, States and center to coordinate on the framework development to bring linkages between all initiatives.

Unified regulator for IFSC.

Export duty should not be levied on goods supplied to developers and used in manufacture of goods exported.

Infrastructure status to improve access to finance and enable long term borrowing.

Promote MSME participation in 3Es and enable manufacturing enabling service players to locate in 3E.

Dispute resolution through arbitration and commercial courts.

Formulation of separate rules and procedures for manufacturing and service SEZs.

►MSMES- PROSPECTS, CHALLENGES AND WAY FORWARD

The MSME sector employs around 111 million people and is the second largest employer after agriculture. It contributes 28% of India's GDP and 45% of our manufacturing output. However, MSMEs continue to face challenges of formalization, access to technology, access to timely and adequate finance, improving competitiveness, availability of skilled manpower, access to latest technology and marketing.

The MSME sector is yet to benefit from the advances in digitization, which can substantially reduce the cost and time for this sector. The sector was also affected in the recent past due to structural changes in the economy such as implementation of GST and demonetisation.

VARIOUS GOVERNMENT INITIATIVES/PROGRAMMES FOR DEVELOPMENT OF MSMEs

- **Prime Minister Employment Generation Programme (PMEGP)**: Financial Support for setting up of new MSMEs; Maximum Cost of project: Rs 25 lakhs

- **ZED Certification Scheme:** Financial support for manufacturing products which have Zero Defect and Zero Effect on Environment.
- **Credit Guarantee Trust Fund for Micro & Small Enterprises (CGT SME)**: Collateral free loan up to a limit of Rs 1 crore is available for individual MSE on payment of guarantee fee to bank by the MSE.
- **A Scheme for promoting Innovation, Rural Industry & Entrepreneurship (ASPIRE)**: One-time grant of 100% of the project cost or Rs 1 crore (whichever is lower) for promotion of innovation and entrepreneurship
- **National Manufacturing Competitiveness Programme (NMCP)**: Credit Linked Capital Subsidy for Technology Upgradation (CLCSS); Lean Manufacturing Competitiveness for MSMEs
- **MSME SAMADHAAN**: Portal to monitor the delays in the payments
- **MSME-SAMBANDH**: Portal to monitor Public procurement policy
- **TReDS Platform**: Discounting of invoices for MSMEs from corporate buyers through multiple financiers.

NEW DEFINITION OF MSME

Problems with the existing Definition of MSME: The definition of MSMEs has been provided under MSMED Act, 2006. Presently, MSMEs are defined in terms of their investment in plant and machinery or equipment as shown below. There are a number of problems with the existing definition of the MSMEs.

1. Definitions based on investment limits in plant and machinery/ equipment were decided when the Act was formulated in 2006 and does not reflect the current increase in price index of plant and machinery / equipment.
2. MSMEs due to their informal and small scale of operations often do not maintain proper books of accounts and hence find it difficult to get classified as MSMEs as per the current definition.
3. Presently, the MSMEs get number of benefits from the government such as collateral free loans, tax concessions etc. Hence, if they lose the status of MSME, then they would no longer be able to avail these benefits. Hence, in order to avoid losing the status of MSME, the industries deliberately keep their investment levels below the threshold mentioned in the MSMED act.

Hence, in a way, the existing definition has incentivised the MSMEs to remain smaller rather than incentivising them to grow bigger and create more number of jobs.

Existing MSME Classification			
Criteria: Investment in Plant & Manufacturing or Equipment			
Classification	**Micro**	**Small**	**Medium**
Manufacturing Enterprises	Investment < Rs 25 lakh	Investment < Rs 5 crore	Investment < Rs 10 crore
Service Enterprises	Investment < Rs 10 lakh	Investment < Rs 2 crore	Investment < Rs 5 crore
Revised MSME Classification			
Composite Criteria: Investment and Annual Turnover			
Classification	**Micro**	**Small**	**Medium**
Manufacturing Enterprises	Investment < Rs 1 crore And Turnover < Rs 5 crores	Investment < Rs 10 crore And Turnover < Rs 50 crores	Investment < Rs 50 crore And Turnover < Rs 250 crore
Service Enterprises			

New Definition: As shown in the above table, 3 important changes have been introduced in the new definition of MSMEs:

1. The Investment limit has been increased.
2. An additional criterion of annual turnover has been introduced.
3. The distinction in the definition of Manufacturing and service sector enterprises has been done away with.

U.K. SINHA COMMITTEE RECOMMENDATIONS TO IMPROVE THE FUNCTIONING OF MSMES

Institutional Framework: In order to have convergence of various MSME related policies, **National Council for MSMEs** should be set up at the apex level under the Chairmanship of the Prime Minister. The States should have a similar State Council for MSMEs, for better co-ordination of developmental initiatives.

Further, Ministry of MSME may consider setting up of a **Non-Profit Special Purpose Vehicle (SPV)** to **support crowd sourcing of investments** by various agencies particularly to pave the way for conducive business ecosystem for MSMEs.

Addressing delays in Payments to MSMEs by setting up a monitoring authority under the office of Development Commissioner MSME. Further, majority of the States have only one **MSE Facilitation Council (MSEFC)** which is not adequate to cater to delayed payment cases arising in the entire State. Hence, there is a need to increase the number of Facilitation Councils particularly in larger States.

Expanding the Scope of GeM Portal: Government should make it mandatory for PSUs/ Government Department to procure from MSEs up to the mandated target of 25% through the GeM portal only. Further, the portal can be developed as a full-fledged market place enabling MSE sellers to procure raw-material as well.

Improving Ease of Doing Business: Presently, MSMEs must do multiple registrations with various entities such as Udyog Aadhaar portal, GSTN, National State Insurance Corporation (NSIC) etc. This leads to replaced by making PAN as a Unique Enterprise Identifier (UEI) and the same should be used for various purposes like procurement, availing government sponsored benefits, etc.

Capacity Building: Proposal to establish Enterprise Development Centres (EDCs) within District Industries Centres (DICs) has to be expedited; Provide handholding support to the entrepreneurs in various aspects such as technical know-how, managerial skill, filling up of the knowledge gap, etc.

Focussing on MSME Clusters: MSME clusters should collaborate with companies having innovation infrastructure, R&D institutions and universities that specialize in a specific industry or knowledge area.

Distressed Asset Fund: Assist units in clusters where a change in the external environment, e.g. a ban on plastics or 'dumping' has led to a large number of MSMEs becoming NPA.

ACCESS TO FINANCE

- **PSBLoansIn59Minutes portal** as of now caters only to existing entrepreneurs having information required for in-principle approval such as GSTIN, Income Tax returns, bank statement, etc; Portal should also cater to new entrepreneurs, who may not necessarily have such information, including those applying under PMMY loan and Stand-up India.
- **Priority sector lending (PSL)** guidelines apply uniformly to all the lenders and mandates specific targets to banks to lend to priority sectors, i.e. agriculture, small and marginal farmers, micro enterprises, weaker sections, etc. At present, the overall target for the universal bank is 40% and target for small finance bank is 75%. The committee has recommended that for banks that wish to specialize in MSME lending, the requirements to do agricultural lending under PSL can be waived provided they achieve 50% PSL lending target to MSMEs in the case of Universal Banks and 80% in the case of Small Finance Banks.
- The RBI should increase the **limit for non-collateralised loans** to Rs 20 Lakh from the present limit of Rs 10 Lakh. This limit of Rs 20 lakh should also be applicable to the loans provided under the MUDRA scheme.

Loan Service Providers: RBI should create a new category of Loan Service Providers (LSPs). The LSPs would act as agents of the borrowers (MSMEs) and offer individualised advice to them catering to all the aspects of finance.

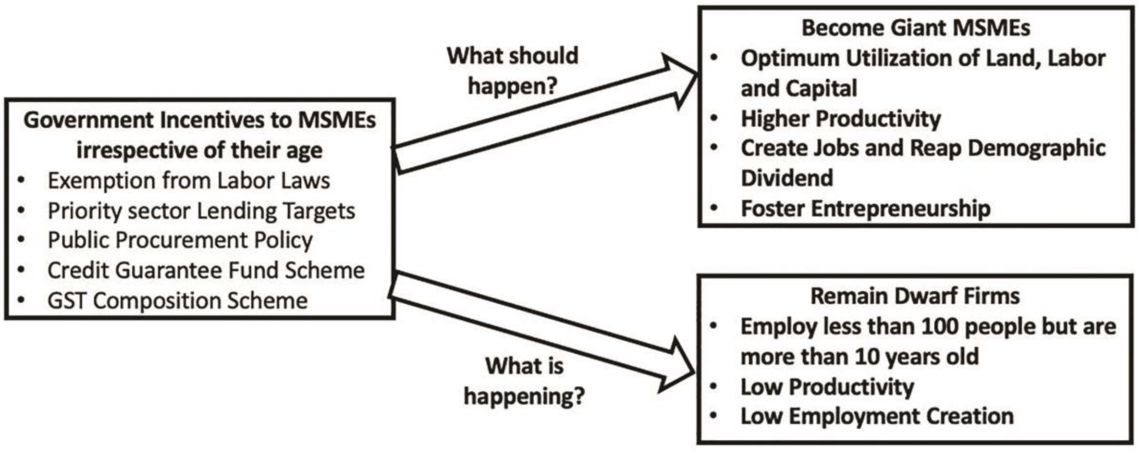
Development service providers: MSMEs lack expertise in product development, technology adoption and marketing strategy. The Government should build networks of development service providers that can provide customized solutions to MSMEs in the area of technology, product development and marketing techniques; Need for strengthening of MSME Export Promotion Council.

Insurance: Government should take active efforts to provide insurance coverage to MSME employees on the lines of PMSBY and PMJJBY schemes.

Fund-of-Funds: Government sponsored Fund of Funds (FoF) to support VC/PE firms investing in the MSME sector

RECOMMENDATIONS OF ECONOMIC SURVEY 2018-19 FOR MSMEs

The Government provides a number of incentives so as to nurture Infant MSMEs to grow into large sized giants and ensure optimum utilization of factors of production, higher productivity and job creation. However, the Government policies as shown below create perverse incentives for firms to remain small rather than grow bigger.



The above-mentioned problem has led to dominance of dwarf MSMEs firms which are more than 10 years old but yet continue to employ less than 100 people. These firms account for more than half of all firms in manufacturing by number, but their contribution to employment is only around 14%. This clearly shows that these firms are reluctant to grow bigger due to the fear of losing out on the benefits enjoyed by MSMEs.

The dominance of dwarf firms has led to a number of problems- Stagnation in Share of Manufacturing Sector (17%), Problem of Missing Middle, lower employment elasticity, Informalization of jobs etc.

In this regard, the Economic Survey 2018-19 has given the following recommendations:

Incentivizing 'infant' firms rather than 'small' firms: Provision of incentives to firms irrespective of their age has led to dwarf firms. Hence, incentives should be limited to initial 5-7 years only.

Re-orientation of PSL: Under MSME's PSL targets, it is necessary to prioritize start-ups and infants.

Focus on High Employment elastic sectors such as Textiles, leather etc.

Deregulating labour law restrictions can create significantly more jobs, as seen by the recent labor reforms introduced in states such as Rajasthan.

MSMEs that grow not only create greater profits but also contribute to job creation and productivity in the economy. Hence, the Government policies must, therefore, focus on enabling MSMEs to grow by unshackling them.

►DEFENCE MANUFACTURING- INITIATIVES, PROSPECTS AND CHALLENGES

India is the world's second largest arms importer, accounting for about 12% of global arms imports. This external dependence for Defence Goods not only poses security risk, but it is also a challenge to Aatma Nirbhar Bharat. Keeping in mind, the challenges faced by Defence Manufacturing Sector, the Government had unveiled Defence Production & Export Promotion Policy (DPEPP) 2020 in August 2020.

OBJECTIVES OF DEFENCE PRODUCTION & EXPORT PROMOTION POLICY (DPEPP) 2020

- Achieve a turnover of **Rs 1,75,000 Crores (US$ 25Bn) including export of Rs 35,000 Crore (US$ 5 Bn)** in Aerospace and Defence goods and services by 2025.
- To reduce dependence on imports and take forward "Make in India" initiatives through domestic design and development.
- To promote export of defence products and become part of the global defence value chains.

STEPS TAKEN BY THE GOVERNMENT TO BOOST INDIGENIZATION OF DEFENCE INDUSTRY

The size of the Defence Industry, including Aerospace and Naval Shipbuilding Industry, is currently estimated to be about Rs 80,000 Cr in 2019-20. While the contribution of Public Sector is estimated to be Rs 63,000 crores, the share of Private Sector has steadily grown to Rs 17,000 crores over the years.

Defence Procurement Procedure (DPP): A new category of capital procurement 'Buy Indian-IDDM' (Indigenously Designed, Developed and Manufactured has been introduced in Defence Procurement Procedure (DPP) to promote indigenous design and development of defence equipment. Under this, highest priority would be given to procurement of Defence Goods which are indigenously designed, developed and Manufactured within India.

Defence Offset Policy: Persuade foreign vendors to outsource orders, transfer technologies to Indian companies and invest in India.

Import Bans: Under 'Aatmanirbhar Bharat', a list of 101 items has been prepared for which there would be an embargo on the import.

Innovations for Defence Excellence (iDEX):_ iDEX is aimed at creation of an ecosystem to foster innovation and technology development in Defence and Aerospace by engaging Industries including MSMEs and Start-ups.

Strategic Partnership Model (2017): Indian companies can seek technology transfers from MNCs to set up domestic manufacturing infrastructure and supply chains.

Policy for indigenisation of components and spares used in Defence Platforms (2019): To indigenize the imported components and sub-assemblies for defence equipment and platform manufactured in India.

Defence Corridors: In Feb 2018, Government decided to establish two defence industrial corridors (One in UP and another in Tamil Nadu) to promote growth of defence industrial base in India.

Public Procurement Order: Department of Defence Production has notified list of 24 items for which there is local capacity and completion and procurement of these items shall be done from local suppliers only irrespective of the purchase value.

CONSTRAINTS AND CHALLENGES IN BOOSTING DEFENCE MANUFACTURING

Lack of Independence and autonomy of Ordnance factory Board (OFB): This has been addressed recently through the Aatma Nirbhar Bharat Package through the decision of Corporatisation of OFB.

Higher Preference to Defence PSUs:_The Government tends to give higher preference to Defence PSUs which in turn constraints the growth of Private sector.

Delays in procurement of Defence Goods

Failure in Defence Offset Policy wherein the CAG has recently highlighted that most of the time Foreign vendors give commitment for offsets in order to win the tender, but later on do not fulfil their commitments.

Lack of Investment in R&D which is around 0.7% of India's GDP

Failure to attract FDI in Defence manufacturing due to over-dependence on Defence PSUs, Poor Ease of Doing Business etc.

STRATEGIES TO BOOST DEFENCE MANUFACTURING

- Set up **Project Management Unit (PMU)** that should be able to provide clear picture of future requirements of Armed Forces to Industries. It should also support the acquisition process and facilitate management of the contracts.
- **List of Defence Goods whose import is banned** should be reviewed and updated regularly.
- Need to move away from **licensed production to Design, Develop and produce** wherein the India should own the Design Rights and Intellectual property rights.
- **Procurement of indigenously developed products/systems** involves conducting a number of tests and trials and consumes a considerable amount of time as a result of which placement of orders is delayed. This needs to be streamlined and expedited.
- **Set up Indigenisation portal** to provide necessary support to MSMEs/ Start-ups for import substitution.
- Need to have a **distinct budget head for domestic capital procurement.**
- Tap growing o**pportunities in Aerospace Industry such as Aircraft MRO, Unmanned Aerial Vehicles (UAVs)** etc.
- **Enhance Investment in R&D** and convert the **prototypes into commercially useful products**.
- **Promote export of domestically manufactured** defence products through Govt to Govt agreements and Lines of Credit/Funding.

►ENSURING SELF-RELIANCE IN PHARMACEUTICAL INDUSTRY

The Indian Pharmaceutical Industry is the third largest in the world in terms of volume and 14th largest in terms of Value. However, in order to make our Pharmaceutical Industry self-reliant, there is a need to reduce our dependence on the import of Active Pharmaceutical Ingredients (APIs) from China.

REASONS FOR HIGHER IMPORT DEPENDENCE ON CHINA FOR APIs

Before 1991, Indian Pharma Industry imported only 0.3% of its API requirements from China. However, presently, almost two-thirds of APIs are imported.

- Imports from China work out to be cheaper and cost-effective. (China is largest producer of APIs accounting for 20% of world's production)
- Uncertainty of price fluctuations from other producers such as US, Italy etc.
- Lack of suitable policies and incentives to boost indigenous development and production of essential APIs within India

- Time consuming environmental clearances and Red-tapism

MAJOR CONSTRAINTS AND CHALLENGES IN PRODUCTION OF APIS IN INDIA

- Non-availability of raw materials, Chemicals and solvents needed for the manufacture of APIs.
- Currently, if APIs are manufactured in India, the cost would be 20% higher as compared to China
- Lower Profit margin in the manufacture of APIs.
- Inadequate Financial support to Indian companies for manufacture of APIs.

INITIATIVES TAKEN BY GOVERNMENT TO PROMOTE MANUFACTURE OF APIS

Scheme for Promotion of Bulk Drugs: Grants-in-Aid to States with a maximum limit of Rs. 1000 Crore per Bulk Drug Park.

Production Linked Incentive Scheme: Financial incentive to eligible manufacturers of identified critical bulk drugs on their incremental sales over the base year (2019-20) for a period of 6 years.

STEPS TO BE TAKEN TO BOOST MANUFACTURING OF APIs

- Build a National Stockpile of APIs to ensure uninterrupted supply.
- Creation of mega drug manufacturing clusters with common infrastructure facilities
- Drugs manufactured from indigenously manufactured APIs should be given preference in Government procurements
- Increase the customs duty on the imported APIs in a phased manner
- Alternate markets such as Vietnam, Indonesia etc. needs to be explored till the time India develops Indigenous capability
- Academia-Industry collaboration to boost the production of chemicals for manufacture of APIs
- Early Stage Government R&D Support in form of fiscal incentives
- Adoption of Good Manufacturing Practices (GMP) and Good Laboratory Practices (GLP) by the MSMEs.
- Revitalise Public sector Enterprises such as Hindustan Antibiotics Ltd.

►ELECTRONICS MANUFACTURING- INITIATIVES, CHALLENGES AND WAY FORWARD

The Union Cabinet has approved three major schemes to boost domestic manufacturing of Electronic goods and to get India integrated into Global value chains (GVCs). These schemes have been launched with 3 major objectives:

- Attract MNCs such as Apple, Samsung, Oppo, Vivo etc. to start manufacturing mobile phones for exports.
- Enable Indian Companies such as Micromax, Lava, Intex etc. to become global champions.
- Attract investments in selected electronic components such as semiconductors, transistors etc. so that India gets integrated into Global value chains (GVCs).

These schemes can generate manufacturing revenue potential of Rs 10 lakh crore and create direct and indirect jobs for 20 lakh people by 2025.

PRESENT STATUS OF ELECTRONICS INDUSTRY IN INDIA

Production of Electronic Goods: Contributes 2.3% of India's GDP; India's share in electronics manufacturing has growth from 1.3% (2012) to 3% (2018); Second largest producer of Mobile phones after China.

Higher Demand for Electronic Goods: Imports- $ 56bn; China accounts for 70% share; Decline in share of domestic mobile companies (Micromax, Intex, Lava, Karbonn) from 45% to 19% in last 2 years.

DETAILS ABOUT THE NEW SCHEMES

1. **Production Incentive Scheme (PLI) for Large Scale Electronics Manufacturing**

Objective: Production linked incentive to boost domestic manufacturing and attract large investments in mobile phone manufacturing and specified electronic components including Assembly, Testing, Marking and Packaging (ATMP) units.

Incentives: Extend an incentive of 4% to 6% on incremental sales (over base year) of goods manufactured in India for a period of 5 years subsequent to the base year as defined.

2. **Scheme for Promotion of manufacturing of Electronic Components and Semiconductors (SPECS)**

Objective: To promote the domestic manufacturing of Electronic components and to focus on "Assemble in India".

Incentives: 25% of capital expenditure for the manufacturing of goods that constitute the supply chain of an electronic product.

3. Modified Electronics Manufacturing Clusters (EMC2.0)

Objective: Support setting up of both Electronics Manufacturing Clusters (EMCs) and Common Facility Centers (CFCs)

Incentives: Availability of ready infrastructure and Plug & Play facility for attracting investment in electronics sector:

CRITICAL ANALYSIS

Positives: 22 companies have filed application under the new schemes (Samsung, Foxconn, Wistron, Pegatron etc)

Concerns:

- Benefits available to companies lower in comparison to benefits available in China and Vietnam
- Focusses on increasing production and not value addition. Companies may resort to importing cheaper components to enhance production and hence set back to "Assemble in India". Incentives need to be provided on both production and value-addition. This will incentivise global MNCs such as Samsung, Apple etc. to move their entire assembly line to India.
- Lack of development of semiconductor manufacturing fab units in India.

►MANUFACTURING OF MEDICAL DEVICES

The Indian Medical device Industry is a sunrise segment in healthcare space. However, India depends on imports up to an extent of 85% of total domestic demand of medical devices. Hence, in order to achieve self-sufficiency and become major exporter of medical devices, the Union Cabinet has approved the following schemes:

- Promotion of Medical Device Parks
- Production Linked Incentive (PLI) Scheme for promoting domestic manufacturing of medical devices.

PRESENT STATUS OF MEDICAL DEVICE INDUSTRY IN INDIA

The Indian healthcare Industry was valued at over $ 100 billion in 2016 and is expected to reach $ 175 billion with CAGR of 20%. The medical device Industry was accorded the status of independent Industry in 2014 when it was included as one of focus sectors of "Make in India Program". The Indian Medical device Industry is highly fragmented. Currently, this sector is dominated by MNCs and with 80-85% of demand met through imports. Approximately, around 30% of the domestically manufactured devices are exported, in which consumables and disposables segment has the largest share.

PROBLEMS FACED BY SECTOR

- Lack of favorable policy and regulatory framework
- Unlike Pharmaceuticals, manufacturing of medical devices is dependent on a mix of technologies such as engineering, electronics, material science and IT. Hence, India has failed to emphasis on domestic manufacturing of medical devices.
- Medical Device sector in India suffers on account of lack of adequate infrastructure, domestic supply chain and logistics, high cost of finance, inadequate availability of quality power, limited design capabilities and low focus on R&D and skill development, etc.

INITIATIVES

Promotion of Medical Devices Parks: The Scheme aims to promote Medical Device Parks in the country in partnership with the States. A maximum grant-in-aid of Rs.100 crore per park will be provided to the States.

Production Linked Incentive (PLI) Scheme: Under the Scheme, incentive @ 5% of incremental sales over base year 2019-20 will be provided on the segments of medical devices identified under the Scheme.

BENEFITS OF THE SCHEMES

- Boost domestic manufacturing and attract large investments in the medical device sector
- Setting up of Common Infrastructure Facilities in 4 Medical Device Parks is expected to reduce manufacturing cost of medical devices.
- Generation of additional employment of 34,000 jobs over a period of five years.
- Substantial reduction in import of medical devices.

►NEED FOR SOLAR MANUFACTURING STRATEGY

India has made rapid strides in the solar energy capacity addition in recent times. The solar generation capacity has increased by around 10 times from 2,650 MW in 2014 to 28 GW in 2019. The government had an initial target of 20 GW of solar capacity by 2022, which was achieved four years ahead of schedule. However, in

spite of the rapid progress achieved, India has failed to become the manufacturing hub of Solar panel cells and it continues to rely on the cheaper equipment from China.

NEED FOR SOLAR MANUFACTURING STRATEGY

Huge Potential to generate around 750 GW of solar energy in India by boosting manufacturing of solar panel cells.

Boost **Make in India**

Reduce Import Dependency: While around 80% of the equipment used in wind power projects are manufactured locally, in the case of solar projects about 90% of the equipment are imported and 85% of which come from China

Poor Domestic Manufacturing: India has an annual solar cell manufacturing capacity of about 3 GW while the average annual demand is 20 GW.

EFFORTS TAKEN BY GOVERNMENT TO BOOST SOLAR MANUFACTURING

- 100% foreign investment in solar power manufacturing under automatic approval.
- foreign investors encouraged to set up solar power plants on build-own-operate basis.
- safeguard duty of 25% on imports

Problems in Solar Manufacturing in India: Lack of human capabilities, technological capabilities and huge capital in order to substitute cheaper imports from China.

LESSONS TO BE LEARNT FROM CHINA'S EXPERIENCE

China has emerged as a global player in Solar manufacturing mainly on account of 3 reasons.

- Human and Technical Know-how:
- Proactive Government Policy such as subsidized land acquisition, access to raw materials, flexible labor laws, incentives for exports etc.
- Access to Capital to gain competitive edge over the industries located in other countries.

►TELECOMMUNICATION SECTOR- STATUS, OPPORTUNITIES AND CHALLENGES

The Telecommunication sector is considered as a powerful tool of development and poverty reduction. It is one of the key enablers for meeting several Sustainable development Goals (SDGs).

PRESENT STATUS OF TELECOMMUNICATION SECTOR

Size and Contribution: Currently, India is the world's second-largest telecommunications market with a subscriber base of 1.16 billion. It contributes almost 8.2% of India's GDP.

Tele density: 88% (Urban- 156%, Rural -56%)

Higher share of Private Sector: Since the 1991 LPG reforms, the share of private sector has steadily increased to 88%.

Efficiency of Sector: India is now the global leader in monthly data consumption, with average consumption per subscriber per month increasing 146 times from 16 MB in 2014 to 9.06 GB in 2019.

CHALLENGES AFFECTING THE TELECOMMUNICATION SECTOR

Higher Licensing Fee: Presently, the Telecom companies are required to pay higher share of their revenue in form of various fees such as Licensing Fee (3%), Spectrum Usage Charges (3%) and Universal Service Obligation Fund (5%). This in turn affects their profit margin and reduces their ability to undertake higher investments.

Cut-throat Competition: The entry of new private players such as Reliance Jio has undoubtedly benefitted the consumers in terms of reduced call and data charges. However, the stiff competition has led to price wars among telecom operators. This had an overall negative impact on the telecommunication sector in the form of reduced revenues and higher debt (almost 8 lakh crores).

Higher NPAs of Telecom Companies: The poor financial position of Telecom companies has had a contagion impact on Banking Sector. In a way, this has created a vicious cycle wherein the Banks have been reluctant to lend loans to these loss-making Telecom companies.

Broadband Connectivity: Fixed broadband penetration in India is among the lowest in the world at only 6 per cent as compared with 55 per cent in China, 70 per cent in Eurozone and 80 per cent in Japan.

Limited Spectrum Availability: Presently, the government has proposed to auction spectrum in 3300-3600 Mhz bands for the roll out of 5G services in India. However, only about 175 units are available in the 3300-3600 Mhz band. The rest is under the control of ISRO and Ministry of Defence. 5G requires a minimum of 100 MHz block. Anything less, will not be attractive for Telecom operators.

Poor Connectivity: Lack of Telecom Infrastructure in Rural and Remote areas as evident in poor Tele density of 56% as compared to Urban Tele density of 156%.

Decline in revenue due to growth of Over the Top (OTT) providers: OTT providers are the entities that offer ICT services without owning or operating the network. The best examples include Skype, WhatsApp, Snapchat, Google Talk, Netflix etc. Some of these apps such as WhatsApp, Skype etc. provide options such as Call, messaging etc. which are similar to services offered by Telecom operators leading to decline in their revenue.

Recent Judgement of Supreme Court: Recently, in 2019, the SC ruled that the Adjusted Gross Revenue (AGR) of the Telecom Operators would include both Core and Non-Core revenue. This judgement of SC has led to increase in the share of revenue which the Telecom operators are required to pay to the Government in form of various fees. The total burden on all the telecom operators due to the SC judgement is as high as around Rs 1.4 lakh crores.

RECENT REFORMS PACKAGE FOR THE TELECOM SECTOR (SEP 2021)

Rationalization of Adjusted Gross Revenue: Henceforth, AGR would include only the core revenue. Non-Core Revenue will be excluded from the calculation of AGR. This is set to reduce the financial burden on the Telcom operators in future.

Moratorium on the payment of existing dues for a period of 4 years. This move is expected to ease liquidity constraints of the Telecom Operators and would help them to undertake investment in new age technologies such as 5G.

Spectrum Tenure: In future Auctions, tenure of spectrum would be increased from 20 to 30 years.

No Spectrum Usage Charge (SUC) for spectrum acquired in future spectrum auctions.

Changes in FDI Norms for Telecom Sector: Presently, 49% FDI is allowed through the Automatic Route and up to 100% through the Approval Route. Now, the Government has decided to allow 100% FDI through the automatic route.

►SHIP BREAKING INDUSTRY IN INDIA

In her Budget Speech, the finance minister has announced that the Ship recycling Capacity in India would be doubled by the end of 2024 leading to creation of additional employment opportunities of 1.5 lakh jobs. In this regard, let us understand the various facets of Ship Breaking Industry in India.

Global Ship Breaking Industry: Earlier, the ship breaking Industry was concentrated in the advanced economies such as US, EU etc. However, over a period of time, the global ship breaking Industry has shifted towards the developing economies such as **Bangladesh, India, Pakistan, China and Turkey**. More than 80% of the shipping vessels are recycled along the beaches of **Alang (Gujarat), Chattogram (Bangladesh) and Gadani (Pakistan).** The Asian countries dominate the industry because of cheap labour cost and relatively less stringent environmental and health regulations.

SHIP BREAKING INDUSTRY IN INDIA- SIGNIFICANCE AND ISSUES

Due to its natural geographical advantage of a high inter-tidal gradient, favourable weather conditions and low labour costs, India has emerged as a leader in terms of both volume and number of ships broken. Ship breaking yards are located in the states of Gujarat, Maharashtra and West Bengal.

Most ship breaking activity is concentrated in the Alang and Sosiya yards in Gujarat. Alang alone accounts for more than 90 per cent of the ships dismantled in India.

SIGNIFICANCE

- Around 10% of the steel used in India is extracted from the ships.
- Employment generation- more than 55,000 workers alone are employed in Alang.
- Generate Forex revenue.

ISSUES

Environmental problems: Ship breaking leads to release of large amounts of carcinogens and toxic substances such as mercury, lead, sulphuric acid; No proper waste management system; Environmental damage on flora and fauna.

Health of the workers: According to ILO, Shipbreaking is amongst the most dangerous of occupations, with unacceptably high levels of fatalities, injuries and work-related diseases.

SLOWDOWN IN SHIP BREAKING INDUSTRY

The number of ships coming to India for recycling has declined in the recent past. For example, India's global share of ship breaking Industry reduced from 31% (2016) to 26% (2018). One of the most important factors has been the non-compliance of labour and environmental rules. Further, international agencies such as ILO have increasingly emphasised the effective implementation of international conventions such as **Basel Convention** on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

STEPS TAKEN BY INDIA

Recycling of Ships act, 2019: The Indian Parliament has passed Recycling of Ships act, 2019. Through this act, India has acceded to Hong Kong Convention (HKC) which is implemented by International Maritime organization (IMO). The provisions of HKC have also been included in the new Recycling of Ships Act, 2019.

Hong Kong International Convention: The Hong Kong Convention covers the design, construction, operation and maintenance of ships to ensure they can be recycled safely and in an environment-friendly way at the end of their lives. Under the Hong Kong Convention, ships sent for recycling are required to carry an inventory of all hazardous materials on board. Ship recycling facilities are required to provide a "Ship Recycling Plan", specifying how each ship will be recycled, based on its characteristics and its inventory of hazardous materials.

►ENTREPRENEURSHIP AND WEALTH CREATION AT GROSS ROOTS

The "Startup India" campaign of the Government of India recognizes entrepreneurship as an increasingly important strategy to fuel productivity growth and wealth creation in India.

PRESENT STATUS OF ENTREPRENEURSHIP (ECO SURVEY 2019-20)

- India has the 3rd largest entrepreneurship ecosystem in the world (World Bank)
- New firm creation in services is significantly higher than that in manufacturing, infrastructure or agriculture.
- Entrepreneurship at the bottom of the administrative pyramid has a significant impact on wealth creation. 10 per cent increase in registration of new firms per district-year yields a 1.8 per cent increase in GDDP.
- There is a reginal disparity across India in terms of new firms created
- Ease of doing business directly impacts new firm creation

POTENTIAL OF ENTREPRENEURSHIP AT GRASS ROOTS

Huge human capital: Around 70% of the population lives in villages having vast amounts of social and human capital and vast reservoirs of traditional knowledge which can turn the wheels of grass root innovation.

Bottom up solutions: Can be created for sustainable livelihoods and entrepreneurial opportunities. National innovation foundation in its report on grass roots technical innovations listed new techniques created by rural innovators like groundnut digger, paddy thresher, hand operated water lifting device etc.

Cost effective and environment friendly: Such alternatives can also lead to massive turnovers. For instance, the modified boiler, which recycles used stream, leading to lesser fuel and water consumption creates a turnover of Rs1 crore.

Uniqueness in approach: They have their unique learning practices, local solutions and networking capabilities.

However there exist some challenges also

Urban centrism: Stories of innovation in India tend to demonstrate a city-centrism of sorts and thus the grass root innovations do not get their worthy space.

Lack of literature on grass root innovations and lack of empirical studies which can explore the conceptual boundaries of grass root innovation.

Lack of funds and technical knowledge: poor literacy and skills hamper the true potential of grass root innovations.

Therefore, the administrative steps should be taken to promote dialogue with rural innovators, leveraging schools and panchayats to promote rural entrepreneurship and involving civil society and media to reward the grassroots innovators.

We must remember that grass root innovations represent the possibility of radical strides for India and promise boundless rewards if dealt with correctly.

►PRO-BUSINESS VS PRO-CRONY POLICIES

India's aspiration to become a $5 trillion economy depends critically on promoting "pro-business" policy that unleashes the power of competitive markets to generate wealth. At the same time, we need to give up Pro-crony policies that may favour specific private interests.

PRO-BUSINESS POLICIES

- Pro-business policies make it easy to start a business, register property, enforce contracts, obtain credit, bid for natural resources, get permits, and resolve insolvency help firms to function effectively and thereby enable competitive.
- Pro-business policies increase competition, correct market failures, or enforce business accountability.

PRO-CRONY POLICIES

- Pro-Crony policies may promote narrow business interests and may hurt social welfare because what crony businesses may want may be at odds with the same.
- For example, crony businesses may lobby the government to limit competition in their industry, restrict imports of competing goods or reduce regulatory oversight. These initiatives enhance the lobbying group's income but undermine markets and reduce aggregate welfare.
- Thus, pro-crony policy can inadvertently end up being hurtful to businesses in general.
- Catering to the needs of crony businesses alone without regard for other businesses and the remaining stakeholders in the economy may end up benefitting the preferentially treated firms at the expense of other firms, market efficiency and social welfare.

SECTION-8

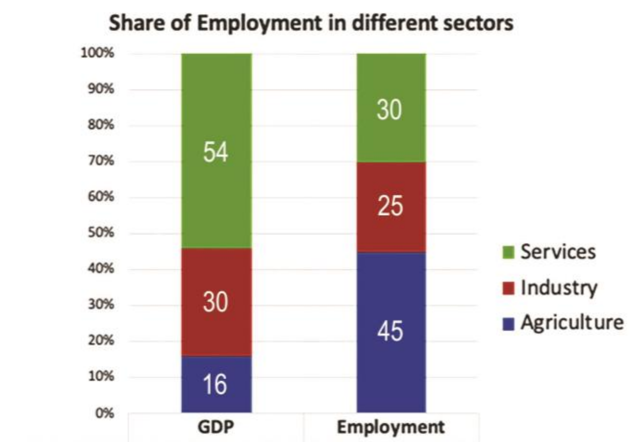
EMPLOYMENT, SKILLS AND LABOUR REFORMS

Previous Year Questions

SUB- THEME	YEAR	QUESTION
EMPLOYMENT, SKILLS AND LABOUR REFORMS	2014	While we found India's demographic dividend, we ignore the dropping rates of employability. What are we missing while doing so? Where will the jobs that India desperately needs come from? Explain.
	2015	The nature of economic growth in India in described as jobless growth. Do you agree with this view? Give arguments in favour of your answer.
		"Success of 'Make in India' programme depends on the success of 'Skill India' programme and radical labour reforms." Discuss with logical arguments.
	2016	Comment on the challenges for inclusive growth which include careless and useless manpower in the Indian context. Suggest measures to be taken for facing these challenges.
		How globalization has led to the reduction of employment in the formal sector of the Indian economy? Is increased informalization detrimental to the development of the country?
	2017	Account for the failure of manufacturing sector in achieving the goal of labour-intensive exports rather than capital-intensive exports. Suggest measures for more labour-intensive rather than capital-intensive exports.

►JOBLESS GROWTH IN INDIA- REASONS AND STRATEGIES NEEDED

EMPLOYMENT SITUATION IN INDIA



	GDP	Employment
Services	54	30
Industry	30	25
Agriculture	16	45

Jobless Growth: - Stagnation in share of Manufacturing Sector to India's GDP at 17% since 1991 reforms, Dominance of small- sized firms, Complexity in the labor laws and land acquisition, lack of skill sets etc.

Nature of Jobs: The Jobs created in the Indian Economy have been concentrated in low- paying, low-productivity informal sectors such as Construction, Small-sized enterprises. The Informal workers account for almost 90% of India's workforce. Hence, concerns have been raised over not just over the number of Jobs created, but also over the nature of Jobs.

Growing Informalisation of Workforce: The share of contractual workers increased from 12 per cent of all registered manufacturing workers in 1999 to over 25 per cent in 2010. The informal workers are paid almost 20 times less wages as compared to formal workers and lack social security benefits.

Working Poors: The informal workers face number of vulnerabilities such as Poor wages, lack of access to social security benefits, poor skill sets, lack effective representation through trade Unions, lack of access to basic facilities such as housing, sanitation etc.

Decline in Female LFPR: India exhibits a low and declining female labour force participation rate. The female labour force participation rate in India was 23.7 per cent in 2011-12 compared to 61 per cent in China, 56 per cent in the United States

Protection and social security: A large number of workers that are engaged in the unorganized sector are not covered by labour regulations and social security.

Skills-Set: According to the India Skill Report 2018, only 47 per cent of those coming out of higher educational institutions are employable.

REASONS FOR JOBLESS GROWTH IN INDIA

- **Focus on Capital Intensive Industries**
  - **Accidental Impact of Government Policies:** Both at the central and the state levels, there are fiscal and monetary incentives (e.g., capital investment subsidy, interest subsidy, export promotion capital goods scheme, credit-linked capital subsidy for technology upgrading of small scale industries, etc.) that provide support for capital to various Industries. An indirect effect of such measures has been to decrease cost of capital and enhance cost of labour. This has incentivised Industries to be more capital Intensive and less labour Intensive.
  - **Nature of Demand:** Since 1991 LPG reforms, the demand for the manufactured commodities has increased substantially. These manufactured commodities are more capital intensive and less labour intensive. And that, in turn, has implications for technology choice and employment generation
- **Presence of Dwarf Firms in MSME Sector:** The Government provides a number of incentives so as to nurture Infant MSMEs to grow into large sized giants and ensure optimum utilization of factors of production, higher productivity and job creation. However, the Government policies as shown below create perverse incentives for firms to remain small rather than grow bigger.
- Poor Implementation of Labour Reforms
- Stagnation in the share of Manufacturing sector
- Need for high skill sets in Services sector such as IT and BPM, Telecommunication etc.
- Disguised unemployment in agriculture accompanied by poor skill sets hindering job creation.
- Employment data. We currently lack timely and periodic estimates of the work force. This lack of data prevents us from rigorously monitoring the employment situation and assessing the impact of various interventions to create jobs.

STRATEGIES TO PROMOTE JOB CREATION

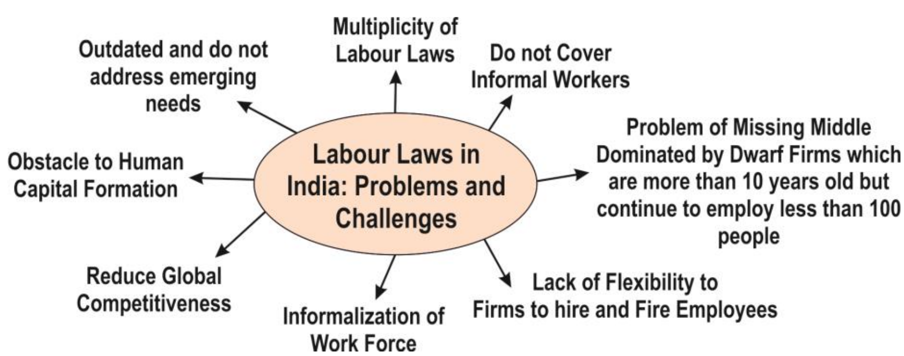
- **Focus on Labour Intensive** Industries such as Textile and Leather

- **Exploring Tourism Potential:** potential to create more than 40 million new jobs in the next 5 years.
- **Smart Farming**: Smart Farming should be explored from inherent strengths in the agriculture sector to shift disguised unemployment from the traditional agriculture to the agro and food processing exports.
- **Focus on Assemble in India:** By integrating "Assemble in India for the world" into Make in India, India would create about 4 crore well-paid jobs by 2025 and about 8 crores by 2030.
- **Incentivizing 'infant' MSME firms rather than dwarf firms:** Provision of incentives to firms irrespective of their age has led to dwarf firms. Hence, incentives should be limited to initial 5-7 years only.
- **Change in Orientation of SEZs**: SEZs to be renamed as 3 E's- Employment and Economic Enclaves. Today, SEZs are viewed as zones promoting only exporters with special privileges; change in nomenclature will bring together all the categories of Investors that enable economic activity and boost employment creation. (*Discussed separately under the Topic of SEZs*)
- **Effective Implementation of Labour Reforms**, including promotion of Fixed term Employment.
- **Promotion of secondary Agriculture** in the rural areas to boost non-farm employment.
- Making investment subsidies conditional on realizing a targeted level of employment per unit of investment.
- **Enhance female labour force participation** by ensuring the implementation of and employers' adherence to the recently passed Maternity Benefit (Amendment) Act, 2017, and the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act. It is also important to ensure implementation of these legislations in the informal sector

►LABOUR REFORMS IN INDIA-CRITICAL ANALYSIS OF THE 4 LABOUR CODES

PROBLEMS WITH LABOUR LAWS IN INDIA

Labour laws are under concurrent list. Currently, there are 44 labour laws under the purview of Central Government and more than 100 under State Governments, which deal with a host of labour issues.



Low Employment Elasticity: Even though, the Indian Economy has grown rapidly, it has failed to create sufficient number of jobs leading to low employment elasticity.

Archaic Labour Laws: Labour Laws need to be reoriented to address the emerging needs of the service sector and the new technology intensive manufacturing sector.

Multiplicity of Labour Laws: This not only leads to significant increase in the compliance costs for the firms and also gives scope for corruption and harassment.

Poor Coverage of workers: Cover only around 10% of the workforce employed as Formal Workers; Remaining 90% Informal workers face significant challenges in terms of poor wages, working environment and lack of social security benefits.

Problem of Missing Middle: The labour law imposes compliance costs on the mid-sized and large firms and incentives the small firms to stay smaller. This in turn adversely affects the job creation in the Indian Economy.

Lack of Flexibility to the Firms: Labour laws fail to provide necessary flexibility to the firms. For example: Industrial Disputes Act (IDA) requires firms employing more than 100 workers to seek permission from their respective state governments to retrench or lay off workers.

Obstacle to Human Capital Formation: The industries play crucial role in skill development. However, as stated before, labour laws discourage firms from employing a large number of permanent workers and steer them towards employing more casual or contract workers. The firms do not invest in upgrading the skills of the informal workers leading to lack of human capital formation.

Reduce the Global Competitiveness: The Labour-intensive industries in India such as Textile and Leather have remained mainly informal in nature due to labour policies.

DETAILS ABOUT THE 4 LABOUR CODES

1. CODE ON WAGES 2019

Minimum Wages Act, 1948	
Provisions	**Problems**
Centre and State required to bring different forms of employment under the act Covered around 1900 Scheduled Employment	Did not automatically extend to new forms of Employment. Did not cover l/3rd of India's workforce.
Included workers in both Organized sector and certain categories of workers in Unorganized Sector	Did not explicitly include vast majority of workers in the Unorganized Sector
Wages fixed based upon the Subsistence Level/Poverty Lines	Low Level of Minimum wages
Minimum Wages varied across Employments, Within States and across States.	Variation across Employments → Gender Bias → Minimum wage for Security Guards (men) higher than that of Domestic workers (Women) Variation within States → Wage Disparities between different forms of Employment. Variation across States → Region-wise Discrimination

IMPORTANT PROVISIONS OF THE CODE ON WAGES

Objective: Regulate wage and bonus payments. The Code replaces the following four laws: (i) the Payment of Wages Act, 1936, (ii) the Minimum Wages Act, 1948, (iii) the Payment of Bonus Act, 1965, and (iv) the Equal Remuneration Act, 1976.

Coverage: Applicable to all employees. The central government will make wage-related decisions for employments such as railways, mines, and oil fields, among others. State governments will make decisions for all other employments.

Floor wage: According to the Code, the central government will fix a floor wage, taking into account living standards of workers. Further, it may set different floor wages for different geographical areas. The minimum wages decided by the central or state governments must be higher than the floor wage.

Fixing the minimum wage: The Code prohibits employers from paying wages less than the minimum wages. Minimum wages will be notified by the central or state governments. While fixing minimum wages, the central or state governments may take into account factors such as: (i) skill of workers, and (ii) difficulty of work.

HOW THE CODE ON WAGES WOULD BENEFIT?

- Expansion in coverage of Employees- covers both formal and informal workers
- Unlike Minimum wages Act, 1948, there is no need to explicitly bring different forms of employments under the Code
- Introduction of National Minimum Wage to address regional disparities
- Addresses gender disparity by ensuring equal remuneration for men and women.
- Reduced Compliance burden since 4 laws have been subsumed into a single code.
- Ease of Doing Business- Replaces inspector with inspector cum facilitators to handle inspections. The Code also provides for inspection which is web based and automatic, thereby eliminating any corrupt practices which were earlier carried by the Inspectors.

CONCERNS WITH CODE ON WAGES 2019

Lack of Methodology for Fixing Minimum Wages: The Code does not outline the methodology for fixing an adequate minimum wage. It completely ignores the formula, which was unanimously recommended by the Indian Labour Conference (ILC) as well as the Supreme

Court ruling in the Raptakos Brett case of 1992. According to this formula, wages should be set by taking into account expenses on food, clothing, fuel and lighting, education and healthcare as well as social costs such as marriages, festivals etc. This methodology prioritised the needs of the workers, rather than viewing them merely as factors of production.

Lower National Level Minimum Floor wages: Anoop Satpathy committee (2019) recommended the government increase the national minimum wage to Rs 375 per day. However, as of now, the minimum wages is still lower at just Rs 178 per day.

Delay in implementation: Even after more than 2 years, the Code on wages along with the labour codes have not been notified by the Government. The Government was expected to implement the labour reforms from April 1, 2021, but it has been delayed further.

Prompt race to the bottom: State Governments can compete with each other to lower the minimum wages so as to attract private sector investment. This goes against the interests of the workers.

Poor Consolidation of Labour Laws: Earlier, the number of provisions were incorporated in the act itself, but now under the Code on wages 2019, these provisions have been converted into rules to be formulated by the Government. Hence, if we combine the Code of wages 2019 along with the rules formulated under it, it would be much bulkier and more complex as compared to previous 4 laws.

Discretionary powers: Minimum wage will be determined according to the skill of the employee, difficulty of work, geographical location etc. This strengthens the discretionary powers of the administrators.

Employer Friendly rather than Worker Friendly: The penalties/fines imposed under the Code on wages, 2019 are quite meagre and hence may not be sufficient to discourage the firms from violation of the law. Hence, the law can be considered to be mere paper tiger.

Grievance Redressal Mechanism: The Wage Code takes away the jurisdiction of courts in providing justice to workers who have faced violations with respect to their wages. This means that workers can no longer access courts, but can only approach the quasi-judicial body and appellate authority set up under the provisions of the Wage Code

2. INDUSTRIAL RELATIONS (IR) CODE

The Code provides for the recognition of trade unions, notice periods for strikes and lockouts, standing orders, and resolution of industrial disputes. It subsumes and replaces three labour laws: the Industrial Disputes Act, 1947; the Trade Unions Act, 1926; and the Industrial Employment (Standing Orders) Act, 1946.

PROVISIONS ON FIXED TERM EMPLOYMENT

Provision: Introduces provisions on fixed term employment. Fixed term employment refers to workers employed for a fixed duration based on a contract signed between the worker and the employer.

Feature	Fixed Term Employee	Permanent Employee	Contact Labour
Type of employment	• Employment under written contract. • No contractor or agency is involved. • On the payroll of the establishment.	• Employment directly under a written contract. • On the payroll of the establishment.	• Engaged in an establishment through a contractor or agency. • Not on the payroll of the establishment.
Term	• Stipulated fixed term. • Employment lapses on completion of term, unless renewed.	• Employed on a permanent basis • Notice must be given for termination of employment.	Based on terms negotiated with the contractor.
Nature of work	Not specified.	Hired for routine work.	Employment may be prohibited in certain cases, e.g., if similar work is carried out by regular workmen.

BENEFITS OF FIXED TERM EMPLOYMENT

- Allow employers the flexibility to hire workers for a fixed duration and for work that may not be permanent in nature
- Fixed term contracts are negotiated directly between the employer and employee and reduce the role of a middleman such as an agency or contractor.
- Benefits the worker since the Code entitles fixed term employees to the same benefits (such as medical

insurance and pension) and conditions of work as are available to permanent employees.

- Improve the conditions of temporary workers in comparison with contract workers who may not be provided with such benefits.

REASONS FOR OPPOSITION

- Unequal bargaining powers between the worker and employer could affect the rights of workers.
- Employer has the power to renew contracts and hence lead to Job Insecurity
- The Code does not restrict the type of work in which fixed term workers may be hired. Therefore, they may be hired for roles offered to permanent workmen.

WHY ARE FIRMS CONTINUING TO HIRE CONTRACT WORKERS INSTEAD OF FIXED TERM EMPLOYEES?

- Ideally, to encourage a shift away from contract workers to fixed-term employees, the government should have completely prohibited the use of contract labour in core activities, that is, those activities for which the establishment is set up and includes any activity which is essential or necessary to the core activity. However, the Industries have been allowed to hire contract workers in core activities under certain conditions such as a sudden increase of volume of work. Such a provision encourages the use of contract workers and undermines the initiative of introducing fixed-term employment.
- The cost of hiring contract workers continues to remain lower than the cost of hiring fixed-term employees. This is so because the Fixed-term employees need to be provided with benefits such as medical insurance, pension, provident fund etc.
- Reduced compliance cost for hiring Contract workers since it is the staffing companies that are required to incur monitoring and litigation costs.
- Rapid growth of Staffing companies

ADDRESSING THE CONSTRAINTS FACED BY FIXED-TERM EMPLOYEES

Constraints: The Industrial Relations Code does not specify a minimum or maximum tenure for hiring fixed-term employees. It does not specify the number of times the contract can be renewed. Also, it does not restrict the type of work in which fixed term workers may be hired. The absence of such safeguards can, in fact, lead to an erosion of permanent jobs.

HOW THIS COULD BE IMPROVED UPON?

The Second National Commission on Labour (2002) had recommended that no worker should be kept continuously as a casual or temporary worker against a permanent job for more than two years. The International Labour Organisation (ILO) has highlighted that several countries restrict the use of fixed term contracts by: (i) limiting renewal of employment contracts (Example- Vietnam, Brazil and China allow two successive fixed term contracts), (ii) limiting the duration of contract (Example- Philippines limits it up to a year), or (iii) limiting the proportion of fixed term workers in the overall workforce.

These recommendations of the Second National Commission on Labour and ILO need to be incorporated.

APPLICABILITY OF STANDING ORDERS

Provision: The 2020 IR Code provides that all industrial establishment with 300 workers or more must prepare standing orders on the matters related to: Classification of workers, method for termination of employment, grievance redressal mechanisms etc.

Problems: This means that Small Scale Industries employing less than 300 workers would no longer be required to lay down standing orders and hence may lead to exploitation of workers.

CLOSURE AND LAY-OFF

Provision: Earlier, an establishment having at least 100 workers was required to seek prior permission of the government before closure, lay-off, or retrenchment. The threshold has been increased to 300 workers.

Problems: Enable small scale Industries to hire and fire workers at will.

Strikes and Lockouts

Provision: Prior notice of 14 days before a strike or lock-out.

Problems: Impacts the ability of the workers to carry out Strike or lock-out; Decreases their bargaining power

Power to Exempt Industries

Provision: Provides the government with the power to exempt any new industrial establishment or class of establishment from any or all of its provisions if it is in "Public Interest".

Reason for Opposition: Factories Act, 1948 permitted exemptions from its provisions only in cases of public emergency and limited such exemption to three months. However, under the IR Code 2020 there is no limit on time duration for which Industries can be exempted. Further, the term "Public Interest" could be interpreted broadly and hence government has wide discretion in providing exemptions.

1. CODE ON SOCIAL SECURITY BILL 2020

This bill seeks to provide social security benefits such as Provident Fund, Insurance etc. to the workers. It seeks to replaces nine laws related to social security. These include the Employees' Provident Fund Act, 1952, the Maternity Benefit Act, 1961, and the Unorganised Workers' Social Security Act, 2008.

SOCIAL SECURITY ENTITLEMENTS

Provision: The 2020 Bill states that the central government through notification provide that Industries employing workers above a certain threshold level would be required to make contributions towards various social security benefits such as Provident Fund, Insurance etc.

Reasons For Opposition: Presently, the threshold level for the contribution towards Social Security scheme has been provided under the law itself. For example, Employees Provident Fund Act, 1952 is applicable to all Industries employing more 20 people. The EPF is not compulsory for all employees. Only those who earn up to Rs 15,000 a month have to contribute 12% of their basic salary plus dearness allowance to EPF. The employer contributes an equal percentage (12%) to the corpus out of which 3.67% goes to the EPF and the rest 8.33% goes towards employees' pension scheme (EPS).

However, the 2020 Bill gives the discretionary power to the Government to lay down the criteria for the eligibility for the contribution to Social Security Schemes. This has been criticised on account of following reasons:

1. Excessive Delegated Legislation.
2. Exclusion of Informal Workers in the Small-Scale Industries from Social Security benefits
3. Against the Idea of Universal Social Security put forward by National Commission on Labour.

EXPANDED COVERAGE OF WORKERS

Provision: The government can make provisions for registration of various categories of workers- Unorganised, Gig Workers and Platform workers. Its ca also notify schemes for their social security. Gig workers refer to workers outside the traditional employer-employee relationship. Platform workers are those who access organisations or individuals through an online platform and provide services or solve specific problems.

Reasons For Opposition: Lack of Clarity in the definition of Unorganised Worker, Gig Worker or Platform Worker. For example, Ola Cab Driver can be considered to be belonging to all the 3 different categories simultaneously.

MANDATORY LINKING WITH AADHAAR

Provision: Employee or a worker (including an unorganised worker) must provide his Aadhaar number to receive social security benefits

Reasons For Opposition: This may violate the Supreme Court's judgement in Puttaswamy Case. In its judgement, the Court had ruled that the Aadhaar card/number may only be made mandatory for expenditure on a subsidy, benefit or service incurred from the Consolidated Fund of India

2. OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS CODE BILL

The Code seeks to regulate health and safety conditions of workers. It subsumes and replaces 13 labour laws relating to safety, health and working conditions. These laws include: Factories Act, 1948; Mines Act, 1952; Dock Workers Act, 1986; Contract Labour Act, 1970; and Inter-State Migrant Workers Act, 1979.

Threshold for Coverage of Establishments

Provision: The 2020 Bill defines a factory as any premises where manufacturing process is carried out and it employs more than: (i) 20 workers, if the process is carried out using power, or (ii) 40 workers, if it is carried out without using power.

Reasons For Opposition: Safety Standards should be applicable to all Industries irrespective of size.

Power to Exempt Industries

Provision: Empowers the Government to exempt any new factory from the provisions of the Code to create more economic activity and employment.

Reasons for Opposition: Factories Act, 1948 provided for exemption only in cases of Public Emergency and for a limited time duration of 3 months. The new provision has led to higher discretionary powers to Government.

Benefits for Inter-State Migrants

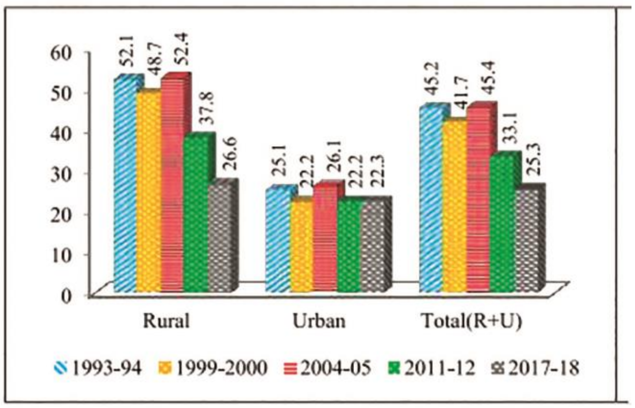
Provision: Benefits for Inter-State Migrant Workers in the form of

- Option to avail PDS either in Native State or state of employment.
- Insurance and Provident Fund Benefits
- Create a database of Inter-state Migrant Workers

Reasons for Opposition: Need to implement 'One-Nation One ration Card' faster; Need to have proper coordination between Centre and States.

►DECLINE IN FEMALE LABOUR FORCE PARTICIPATION RATE (LFPR)

Figure : Female Labour Force Participation Rate (ps + ss, 15-59 ages) by Location (per cent)



IMPORTANT OBSERVATIONS

- Labour Force Participation Rate in 2017-18: Total-49.8%; Male- 75%; Female- 25.3%.
- Female LPFR in Rural Areas (26.6%) higher as compared to Urban Areas (22.3%)
- Decline in the total Female LPFR from 45.2% in 1993-94 to 25.3% in 2017-18.
- Decline in Female LPFR sharper in Rural areas (from 52% in 1993-94 to 26.6% in 2017-18) as compared to Urban areas (from 25.1% in 1993-94 to 22.3% in 2017-18).

REASONS FOR DECLINE IN FEMALE LFPR

SUPPLY SIDE	DEMAND SIDE
• Higher Enrolment of Females in higher Educational Institutions. • More number of Women opting for Household duties due to increase in household incomes. • Cultural factors- Social Constraints and Patriarchal norms.	• Structural Transformation: Decline in agriculture not accompanied by creation of jobs for women in other sectors. • Decline in Labour Intensive Industries in Urban areas. • Significant wage gap between males and females

INITIATIVES TO IMPROVE FEMALE WORK PARTICIPATION

Improving the Safety of Women at Workplace

Mahila Shakti Kendra Scheme: Empowers rural women through community participation.

Female Entrepreneurship: To promote female entrepreneurship, the Government has initiated schemes like MUDRA, Stand Up India and Mahila e-Haat.

Rashtriya Mahila Kosh : Provides micro-credit at concessional terms to poor women for various livelihood and income generating activities.

Prime Minister's Employment Generation Programme (PMEGP): Under the scheme, women entrepreneurs are provided 25 per cent and 35 per cent subsidies for the project set up in urban and rural areas respectively.

Deendayal Antyodaya Yojana- National Rural Livelihoods Mission (DAY-NRLM) - seeks to reach out to 8-9 crore rural poor households and organize one-woman member from each household into affinity-based women SHGs and federations at village and at higher levels.

►SKILLING INDIA: PROSPECTS, CHALLENGES AND WAY FORWARD

Presently, India faces a dual challenge of shortage of trained workforce and non-employability of large number of educated youth, who possess little or no job skills. This is India's skilling paradox: Dwindling opportunities in agriculture, much potential for jobs in manufacturing and services, but not enough people with the right skills.

Present Status: PLFS Report→ only 13% of workforce received training (11%- Informal Training, 2%- Formal Training)

People in working age-group (20-59 years)→ Expected to increase from 50% (2011) to 59% (2041)→ Need to skill the work force to reap demographic dividend.

National Skill Development Mission: Converge, coordinate, implement and monitor skilling activities through institutional structure

CHART: INSTITUTIONAL FRAMEWORK OF NSDM

KEY INSTITUTIONAL MECHANISMS	FUNCTIONS
Governing Council Chair: Prime Minister	• Provide overall guidance and policy direction • Decide on Sub-Missions in high priority aras • Review overall progress and development of Mission activities • Overlook convergence of all skill development initiatives/ schemes across Central Ministries/Departments with Mission objectives.
Steering Committee Chair: Minister. SDE	• Ensure implementation as per Government Council directions • Set targets and approve annual Mission Plan • Review overall progress of Mission activities on a quarterly basis
Mission Directrate (Executive Committee) Chair: Secretary. SDE	• Implement monitor Mission activities • Coordinate implementation of Governing Council & Steering Committee decisions • Coordinate State efforts and submissions • Coordinate Sub-Missions.
NDSA/NSDC/DGT	**State Skill Development Missions**

National Skill Development Agency: Quality Assurance and policy research body. Evaluate existing schemes to improve their efficacy and suggest improvements; Ensure skilling needs of marginalised sections are taken care of etc.

National Skill Development Corporation: PPP to promote skill development: Government (49%); Private Sector (51%) Financing of schemes such as Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Pradhan Mantri Kaushal Kendra (PMKK) etc.

Pradhan Mantri Kaushal Vikas Yojana (PMKVY): Objective: Skill 1 crore people over the four years (2016-2020)

Components: (a) Short-term Training at training centers affiliated and accredited by NSDC and (b) Recognition of Prior learning: Issuing Skill certificates to the people with existing skill set.

Pradhan Mantri Kaushal Kendras: Establish state-of-art Model District training centres in every district of India. Strategy: Provide soft loan up to Rs 70 lakhs to create training infrastructure.

National Skill Development Fund: Set up by Government to receive contributions from Government and Non-Government agencies for skilling. Money spent by NSDC for building skills.

CONSTRAINTS AND CHALLENGES

Poor Penetration of Skills: PLFS Report→ only 13% of workforce received training (11%- Informal Training, 2%- Formal Training). This is quite lower as compared to 68 per cent in the UK, 75 per cent in Germany and 96 per cent in South Korea.

Lower Employability: Only 46 per cent of those coming out of higher educational institutions are employable. (India Skills Report 2021).

Informalisation of workforce: Difficult to upgrade the skills of 90% of the workers who are employed as informal workers.

Quantity and Quality of Training: India's annual skilling capacity is significantly lower than the workforce entering the market annually. Further, the quality of skills imparted in the existing facilities is also poor.

Poor Linkages between Universities and Industry which leads to demand-supply mismatch in the skill

Poor participation of Women who constitute 50% of population

Fragmentation of skill development initiatives across ministries and state governments.

Low public perception on vocational training has reduced its attractiveness

WAY FORWARD

Shift in the Policy

- Implement the labour codes at the earliest to enable creation of formal sector jobs in the economy. Formalisation will increase firms' incentives to invest in upskilling their workers.
- Promote public and private investments in labour intensive sectors such as Textiles and Leather.

Mapping skill requirements for a demand driven skill development ecosystem

- Industry stakeholders must be incentivized to provide data on their skill requirements on regular basis

- Regular labour market studies should be conducted to capture changes in industry requirements to assess the skill sets required.
- Regularly update the curriculum in Universities/Colleges/Training Institutes to address demand-supply mismatch of skill sets.

Improving training delivery and quality

- Capacities of teacher training institutes need to be upgraded to ensure the availability of qualified trainers
- A single regulatory body with branches in all states should be set up to lay down minimum standards for all players in the skilling system

Promote Vocational Education in secondary education

Alternative financial sources such as Corporate Social Responsibility (CSR) funds, MPLAD Fund, MGNREGA etc. need to be explored.

Overseas Employment Promotion Agency should be set up to train and certify Indian workers keen on overseas employment, in line with international standards.

Apprenticeship Training has to be promoted through National Apprenticeship Promotion Scheme (NAPS)

National Rural Livelihoods Mission (NRLM) has to be leveraged to provide necessary skill set to the people in the rural areas.

►APPRENTICESHIP TRAINING PROGRAM

ABOUT APPRENTICESHIP: Apprenticeship training refers to a course of training in any industry or establishment. Apprentices get an opportunity of undergoing 'on the job' training and are exposed to real working conditions.

APPRENTICESHIP ECOSYSTEM IN INDIA

Apprenticeship is regulated in India by Apprentices Act, 1961.

SALIENT FEATURES

- All the establishments having work force (regular and contract employees) of 40 or more are mandated to engage apprentices undertake Apprenticeship Programmes in a range from 2.5% -10% of their workforce (including contractual employees) every year.
- For establishments having a workforce between 6 and 40, engagement of apprentices is optional. Establishments having a workforce of 5 or less are not permitted to engage apprentices.
- National Apprenticeship Promotion Scheme has been launched to promote apprenticeship training and incentivize employers who wish to engage apprentices. Under the scheme, there is 25% of reimbursement of prescribed stipend and sharing of cost of basic training.

STATUS OF APPRENTICESHIP IN INDIA

- Currently India has only about 3 lakh apprentices as compared to the labour force of nearly 500 million people.
- This proportion of less than 0.01% of the workforce compares unfavourably with the countries such as Germany and Australia, which both have around 3.7% of their workforces participating in apprenticeships.
- India has set a target of skilling 500 million people with employable skills by 2022. Thus, apprenticeship will play a crucial role in the task of up-skilling India's workforce and increasing employability.

REASONS FOR POOR APPRENTICESHIP IN INDIA

- **Lack of enterprise engagement in the system:** Only around 24,000 enterprises have taken up apprenticeship in India. The low number of participating enterprises is reported due to high regulatory compliance burden upon employers.
- **Limited occupational coverage:** The Indian formal apprenticeship system has a limited list of designated trades in which apprenticeships can be offered.
- **Inadequate stipend:** The stipend that is required to be paid to apprentices is very low.
- **Limited progression into permanent employment:** Normally, apprenticeships do not lead to permanent employment and hence there is low demand for apprenticeship among the youths.
- **Lack of progression into higher qualifications**: Apprentices who pass their trade tests (All India Trades Tests) obtain a National Apprenticeship Certificate. However, such certificates remain outside the formal educational system and are therefore relatively unattractive to potential entrants.
- **Low status of apprentice training:** India has a very long tradition of informal training and workplace learning. This tradition is preserved today in the

'informal apprenticeship system' that exists alongside the formal system.

RECENT CHANGES IN APPRENTICESHIP RULES

- Minimum stipend amount that will be paid to trade apprentices will be based on qualification. The amount can range anywhere between INR 5000 per month to INR 9000 per month from now onwards.
- Size-limit of an establishment with a mandatory obligation to engage apprentices on an optional basis has been lowered from 40 to 30.
- Reduced the size-limit of an establishment wanting to engage apprentices from 6 to 4. This will allow smaller companies to hire more trainees and give more youths an opportunity to get into the apprenticeship fold.
- Establishments having four or more workers are eligible to engage apprentices.

►ENTREPRENEURSHIP DEVELOPMENT IN INDIA

Entrepreneurs play an important role in the economic development of a country. Successful entrepreneurs innovate, bring new products and concepts to the market, improve market efficiency, build wealth, create jobs, and enhance economic growth. De novo firms that unleash creative destruction shift surpluses from rent-seeking large producers to consumers and broader society.

INITIATIVES TO BOOST ENTREPRENEURSHIP

1. MUDRA Scheme
2. SETU
3. Atal Innovation Mission
4. Start-up India scheme
5. ASPIRE scheme for rural entrepreneurship
6. India Aspiration fund under SIDBI to invest in various venture funds.

CHALLENGES TO ENTREPRENEURSHIP IN INDIA

1. Lack of incentive structures for entrepreneurship
2. Lack of adequate business incubators to support early-stage ventures
3. Inadequate access to capital and insufficient impact assessment
4. Gaps in education and work-readiness
5. Lack of ease of business as compared to advanced entrepreneurial economies, issues of taxation (Angel Tax etc.), Intellectual property regime, complex labour laws and infrastructure deficit.
6. A cultural affinity for stability with emphasises job security over risk taking
7. Stigma over failure
8. Bias against hiring non-engineers and those from non-elite universities
9. Loss of top talent to other countries
10. Trust deficit between government and private sector.

WAY FORWARD

1. Introducing competitions to solve pressing economic and social challenges. For ex. Hackathons etc in which new budding ideas for new companies will come out.
2. Harnessing corporate funds to Finance R&D
3. Improving efficiency of incubators
   - Increasing amount of funding to business incubators
   - Creating virtual incubators
   - Link funding with an institutionalised annual ranking
   - Exit nonperforming incubators
   - Strengthening links between incubators and corporate sector
4. Reforming education sector and upskilling workers
5. Providing access to entrepreneurial courses
6. Strengthening Intellectual Property Rights regime
7. Improving ease of doing business.

Aatmanirbhar Bharat provides a truly watershed moment in our history to ignite the innovative entrepreneurial spirit of New India by focusing on strengthening the above pillars.

SECTION-9

EXTERNAL SECTOR

►EXPORT-LED MODEL OF DEVELOPMENT- NEED, CONSTRAINTS AND WAY FORWARD

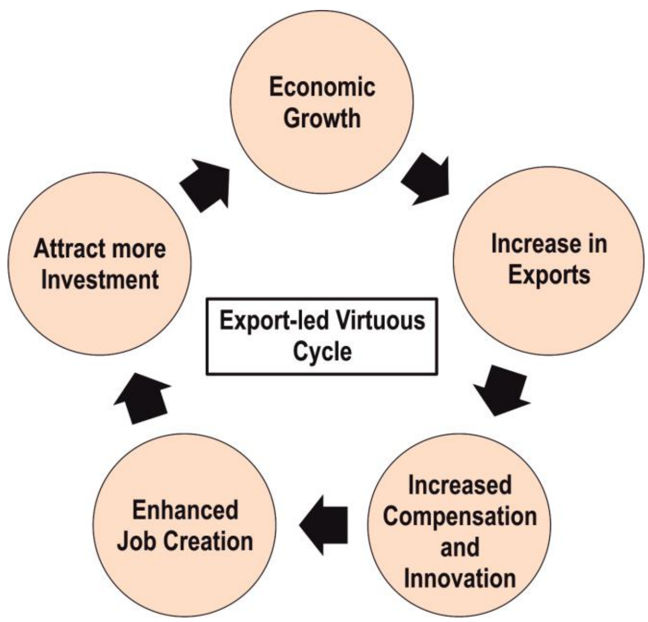
India's vision of becoming a $ 5 trillion economy by 2024 is intricately linked with an export-oriented approach. Greater integration with global value chains (GVCs) will enable India to attract investment, create Jobs, Boost Exports and hence sustain virtuous economic cycle. In line such a strategy, NITI Aayog has taken a significant step by developing the first-ever Export Preparedness Index for Indian states.

IMPORTANT ASPECTS OF INDIA'S TRADE

- India's share in the world's exports has remained stagnant at 1.6% in the last decade.
- India is still critically dependent on import of critical goods such as Pulses, Oilseeds, Electronic Goods, Active Pharmaceutical Ingredients (APIs) etc. which shows lack of self-sufficiency of Indian Economy.
- Imports into India is much higher than exports. This usually leads to Current Account deficit.
- India's export basket is dominated by Capital intensive goods such as Petroleum products, Gems, Jewelry etc. (rather than Labor intensive goods such as Textiles, Leather etc.)
- Undoubtedly, the forex reserves have increased to all time high. However, it is mainly on account of increase in volatile FPI inflows rather than on account of export surplus.
- Unlike China, India has failed to get integrated into Global value chains (GVCs).

NEED FOR EXPORT-LED MODEL

Empirical Evidence: Countries such as Japan, South Korea, Singapore etc. have been able to sustain higher economic growth by following export-led strategy. In the recent times, such an export-led strategy has benefitted both bigger economies such as China as well as smaller economies such as Vietnam.



Shift from Consumption-led to Investment and Export driven Model: India's growth drivers highlight that its economic growth has been primarily propelled by domestic demand which accounts for 60% of India's GDP. However, exports account for only 12% GDP. It should also be recognised that an economy with only $2,000 per capita income will not be able to expand simply based on domestic demand. Moreover, too much focus on domestic demand might strengthen imports faster than exports, which could potentially lead to a widening deficit.

Conducive environment in terms of decline in exports from china on account of US-China Trade war, rising Labour costs, growing anti-china sentiment etc.

Boost Make in India and Assemble in India: By integrating "Assemble in India for the world" into Make in India, India can raise its export market share to about 3.5 percent by 2025 and 6 per cent by 2030. India would create about 4 crore well-paid jobs by 2025 and about 8 crore by 2030.

Innovation and Efficiency: Exporters would be required to innovate and adopt new technologies to boost exports.

INDIA'S PERFORMANCE ON GLOBAL TRADE INDICES

Index	Logistics Performance Index (LPI)	Trading Across Borders – Doing Business	Trade Facilitation Index	Enabling Trade Index
Publishing Agency	**World Bank**	**World Bank**	**OECD**	**World Economic Forum**
What it measures	Logistics Friendliness of countries	Time and cost of the logistical process of countries	Assessment of trade facilitation policies, areas for action and impact of reforms	Factors, policies and services that facilitate trade across borders and to destination.
India's Rank	**44/160 (2018)**	**68/190 (2019)**	**1.52/2 (2018)**	**102/136 (As per 2016)**
Best performing states/ countries	Top 5: Germany. Sweden, Belgium, Austria, Japan	Austria, Belgium, Denmark, France, Hungary, Italy, Netherlands, Spain all tied for Rank 1	1.86/2- Netherlands	Top 5: Singapore, Netherlands, Hong Kong, Luxembourg, Sweden

CHALLENGES IN BOOSTING EXPORTS

→Supply-side:

- **Dominance of Dwarf Firms in MSME Sector:** MSMEs account for around 40% of the exports and 45% of manufacturing output. However, these MSMEs face problems with respect to factors of production such as Land, labour and capital. Plus, most of the MSMEs use obsolete technology which leads to poor efficiency and competitiveness.
- **Higher Logistics Cost:** India's logistics cost as a share of GDP is 14 percent, which is high when compared to developed nations, where it ranges between eight and ten percent. Higher logistics cost in turn reduces the overall competitiveness of Indian economy.
- **Trade Facilitation:** Involves reducing the number of documents needed for trade. Trade facilitation reduces the time to export and cost of exports. In India, Trade facilitation, as measured by "Trading Across Borders" is quite poor. "Trading Across Borders" is one of the parameters for measuring World Bank's Ease of Doing Business.
- **Poor Innovation:** India spends hardly around 0.7% of its GDP on R&D, which is quite lower in comparison to USA (2.1%), China (2.8%), Israel (4.3%) etc. Improvement in innovation ecosystem would help us improve manufacturing competitiveness and help us manufacture high quality goods for the global market.
- **Lack of Market Intelligence** related to consumer preference in export markets. For example, higher sweetness in Indian mangoes is not necessarily in demand in many countries.
- **Identification Challenges:** Each district of a country has a potential equivalent to that of a small country in boosting exports. However, there is lack of focus on identifying potential export clusters within a state.
- **Lack of coordination** among multiple government ministries and departments involved in boosting exports.
- **Adverse Impact of FTAs**: Some of the FTAs with countries such as Japan, South Korea etc. has led to **inverted duty structure** which has in turn encouraged import of finished goods and discouraged domestic manufacturing.

→Policy Instability

- Delay in announcement of incentives under RoDTEP scheme. Even though, this scheme was announced on 1st Jan 2021. The Government has notified the guidelines in Aug 2021.
- Whenever there is increase in prices of agricultural commodities such as Onions, Potato etc., the Government imposes ad-hoc ban on export of such commodities. This affects India's image as a reliable supplier of agricultural commodities.

→Demand-side:

- **Rising Protectionist Policies in importing countries**: High import duties and Quota limits in export markets
- **Easier market access to India's competitors:** Goods from countries such as Bangladesh, Vietnam etc. enter into export markets such as EU, USA etc. at almost zero customs duty. However, Indian goods enter such markets with comparatively higher customs duty and thus our goods become uncompetitive. India's exports of Textiles and Leather to USA and EU has been declining on account of this.
- **WTO Norms**: Indiscriminate application of sanitary and phytosanitary measures by other countries against Indian products. For example, basmati and non-basmati rice exports to the US have been rejected multiple times on the grounds of low hygiene standards. Similarly, the issue of pesticides residues is frequently raised by the EU and Japan

WAY FORWARD

- **Improve Trade Competitiveness** by improving access to factors of production (Land, Labour, Capital), Reduce Logistics costs (14% of GDP) to global benchmarks (8% of GDP), improving Ease of Doing Business etc.
- **Protect the domestic Market** from the import cheap foreign goods through (a) strong and effective technical regulations (b) trade safeguards such as Anti-dumping duties and safeguard duties.
- **Better Inter-Ministerial Coordination**: The ministry of Commerce and Industry must hold regular Inter-ministerial meetings. Further, regular Interactions with the State Governments is also crucial so that trade facilitation takes place under cooperative federalism.
- **Handholding support to MSMEs** The MSMEs need to be provided handholding support to have access to factors of factors and use appropriate technology to boost exports.
- **Increase access to formal finance:** Less than 4 per cent of small firms in India have access to formal finance. The figure for the the US, China, Vietnam and Sri Lanka is 21 per cent.
- **Reorient SEZs (Baba Kalyani Committee):** The SEZs should be renamed as 3 E's- Employment and Economic Enclaves. Focus should not only be on boosting exports, but also on employment creation and GDP growth rate. Incentives given to companies in SEZs should depend upon factors such as Value addition, Technology adoption etc. This would encourage the companies to innovate and compete at the global level.
- **Integration into Global value chains (GVCs)**: Invite large anchor firms in critical products to set up operations in India. Government initiatives like simplified labour laws, PLI incentives, low corporate tax on new manufacturing operations and scrapping of retrospective tax would encourage many firms searching for China plus-one location to shift base to India.

►EXPORT-LED MODELS OF BANGLADESH AND VIETNAM: LESSONS FOR INDIA

PROBLEMS WITH EXPORT-LED MODELS OF BANGLADESH AND VIETNAM

Lack of Diversification of Exports: While most of the exports of Bangladesh are dominated by apparel, exports from Vietnam are dominated by Mobile phones, Textiles, Electronic Goods etc. The poor diversification of exports from these countries is evident in Economic Complexity Index (ECI), published by Harvard growth Lab. This index ranks countries based on how diversified and complex its manufacturing export basket is. The ECI rank for China is 32, India 43, Vietnam 79, and Bangladesh 127. Such lack of diversification of exports hinders development of other crucial sectors such as Agriculture, Defence, Pharmaceuticals etc.

Low Value Addition: One of the reasons for increase in Exports from Vietnam is on account of its integration with the Global value Chains (GVCs). However, the amount of value addition that takes place in Vietnam is quite lower. For example, most of its exports of electronic goods is on account of final assembly of Goods which are manufactured in other countries.

LESSONS FOR INDIA

Both Bangladesh and Vietnam are much smaller economies as compared to India. Obviously, being a large economy, India cannot **rely only on exports** to boost its GDP growth. Over-reliance on Exports could make India more vulnerable to external shocks. For example, the Export-to-GDP (EGR) ratio of Vietnam is around 107%, which makes it highly vulnerable to external crisis such as Global Financial crisis of 2008. In comparison, India's EGR is around 18.7%, which makes it less vulnerable.

Undoubtedly, boosting exports is need of the hour. But it should not be pursued at the expense of other sectors. Rather than focussing entirely on boosting exports, India needs to focus on boosting Manufacturing sector, attract FDI and thus promote economic growth. In that case, exports from India would automatically increase. ***So, rather than treating Exports as means to promote economic growth, the Government must perceive the exports as ends of economic growth.***

►CRITICAL ANALYSIS OF AATMA NIRBHAR BHARAT

The Government has sought to achieve self-sufficiency and boost domestic manufacturing through the Aatma Nirbhar Bharat. Some of the strategies include protectionist and inward oriented policies such as **Ban on imports, Increased Customs duty, Higher preference to Domestic companies in Public Procurement, withdrawal from FTAs** etc.

These inward-oriented strategies highlight that the ***Government sees trade as a problem and not as a solution to economic revival***. This would have following adverse impacts:

Set-Back to Make in India and Assemble in India: Some of the Industries such as Pharma, Automobile, Electronics etc. are heavily dependent on raw materials and hence Increase in customs duty would increase production costs leading to adverse impact on domestic manufacturing and job creation.

Against Well-Established Theory: Theory of comparative advantage states that bilateral trade benefits both the Countries since it enables them to import those goods which otherwise, cannot be manufactured economically as compared to its trading partner.

Hinders Innovation: Shield domestic companies from foreign competition leading to complacency and decline in quality of Goods.

Historical Insights: Policy of import-substitution which started in 2nd five-year plan has failed.

International Experience: Countries such as China and smaller economies such as Vietnam, Malaysia etc. have achieved higher GDP growth rates through free and open trade.

Retaliatory Actions: As evident in US-China Trade war, protectionist policies invite retaliatory actions from other countries and hence makes everyone worse-off.

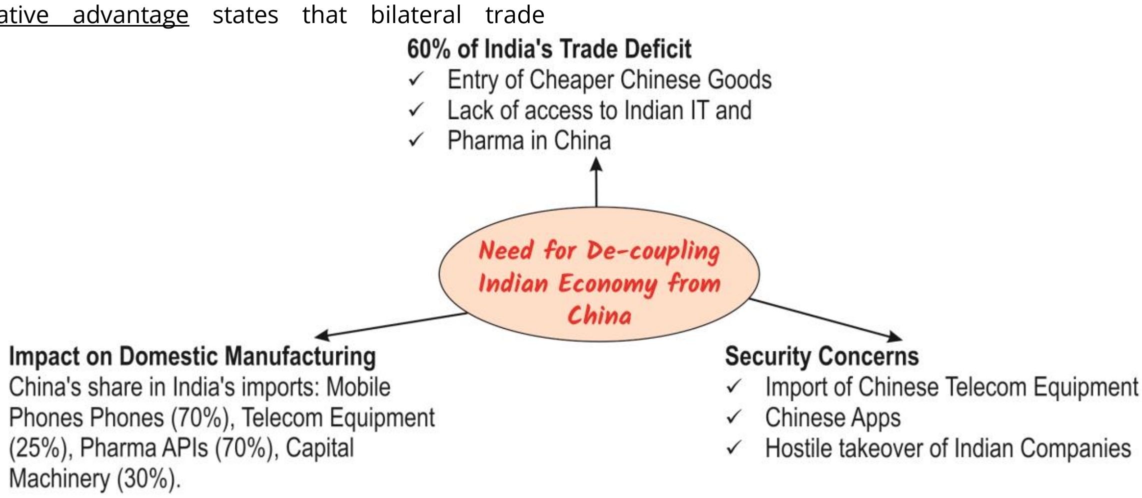
Discourage Foreign Investment: Higher preference to domestic companies leads to lack to level-playing field.

Set back to Export-led Growth: India needs to realize that being open as importer is a prerequisite for becoming successful exporter.

Hence, Government must realize that path to self-sufficiency is through export promotion and global economic integration rather than through protectionism and import-substitution.

►DECOUPLING INDIAN ECONOMY FROM CHINA- AATMA NIRBHAR BHARAT

The Government has come up with the vision of Aatma Nirbhar Bharat to boost domestic Manufacturing, employment, exports and to reduce dependence on non-critical imports. However, one of the biggest hurdles to this goal is the nature of Economic Interaction between India and China as given below:



The Government has adopted various strategies such as Vocal for Local, Stringent FDI norms, higher import tariffs, preference to domestic firms in public procurement etc. to promote Aatma Nirbhar Bharat. However, concerns have been raised over the forced decoupling of Indian Economy from China.

Minimal Impact on China: India accounts for only around 3 % of China's exports. China's FDI into India is hardly around $ 2 bn.

Adverse Impact on India: Some of the sectors such as Pharma, Electric vehicles, Electronics etc. are critically dependent on Chinese raw materials and hence such a strategy would impose additional costs and lead to loss of jobs.

In spite of these challenges, the substitution of Chinese Goods with domestic Goods is not a herculean task. Almost one-third of the Chinese imports constitute low-ech goods that were made earlier by Indians. Accordingly, we can ramp up the production of around 3,000 products such as toys, fabrics, kitchenware, cosmetics within a short period of time. In the medium and long run, the Government has to stick to its stated goal of "Self-Reliant" India and reduce dependence on China.

De-coupling of Indian Economy from China is undoubtedly challenging but not impossible. Within a short period of 2 months, India has become the second largest producer of personal protection equipment (PPE) after China. India can repeat the same feat in other sectors as well.

►CRITICAL ANALYSIS OF VOCAL FOR LOCAL CAMPAIGN

PRESENT STRATEGIES ADOPTED BY GOVERNMENT TO PROMOTE LOCAL GOODS

- **Nationalistic Sentiments:** Appeal to the Nationalistic sentiments of the Indians to buy and Promote Indian Goods.
- **Withdrawing from FTAs** such as RCEP
- **Increasing Customs duty/ Safeguard Duty** on some of the goods such as Solar Panel Cells to promote domestic Manufacturing.
- **Higher Preference** to Domestic Companies in Government Procurement
- **Negative list** to avoid import of certain defence Goods

Benefits	Challenges/ Concerns
Incentivises the Foreign Companies to shift their production base to India → Boost Make in India and Create Employment Opportunities.	Make in India has been launched in 2014. But not quite successful so far due to poor regulatory environment such as hurdles in Land acquisition, delays in environmental clearances, complexity in labour laws. Mere slogans will not lead to increase in FDI. It has to be accompanied by deep structural reforms.
Brands that are Global today, were initially local and grew because of customer support. Hence, buying and Promotion of Indian Brands will enable them to become Global brands in future and boost our Exports.	Consumers are Utility Maximisers → Buy Goods which are of Superior Quality and at lower Prices→ Indian Goods may not be able to compete with Foreign Goods in terms of Quality and Price. (Case in Point is Mobile Phones). Consumers also buy Foreign Goods in order to improve their Social Status and Prestige.
Boosting the Local supply Chain → Make India Self-Dependent → Decrease in Imports into India	Development of local supply Chain requires skilled work force as seen in China. India need to focus more on "Skill India" campaign.
Higher Production of Goods of different Brands→ Increase in Choice of Goods to Indian Consumers	Almost 22% of India's population live below poverty line. Food, Clothing and Shelter is of utmost importance for them. Increase in choice of Goods has no meaning for the people living at lower strata.
Increased demand for Indian Goods → Reduce dumping of Goods by Countries such as China → Improve the trade Deficit	Increased demand for Foreign Goods such as Chinese Goods is mainly on account of Price competitiveness. Unless, the India Goods are able to match the imported Goods in terms

	of quality and prices, Trade Deficit would not improve.
Increase in Domestic Investment and FDI → Increase in Employment Opportunities → Increase in Per-Capita Income → Higher Demand for Goods→ Increase in Investment and FDI (Virtuous Economic Cycle)	Government's strategies such as Increase in Customs duty, Preference to domestic companies in procurement etc. shields the domestic companies from foreign competition. This fosters complacency in domestic manufacturing leading to decline in quality of Goods. India has to realise that it was its integration with Global Economy in 1991 that led to rapid increase in its GDP size from $ 270 billion in 1991 to $ 2.9 trillion in 2019. The Government's strategies to boost local manufacturing takes India back to pre 1991 and hint towards protectionist and Anti-Globalisation policies. Hence, such strategies can be considered to be retrograde.

►INDIA'S EXPERIENCE WITH FTAS- BENEFITS, CHALLENGES AND WAY FORWARD

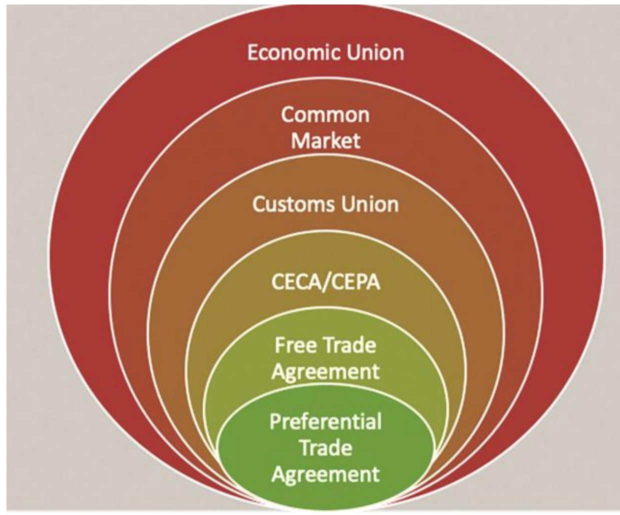
RATIONALE BEHIND FREE TRADE AGREEMENTS (FTAs)

Access to high quality Raw Materials to support the domestic Industries and promote "Make in India" and "Assemble in India".

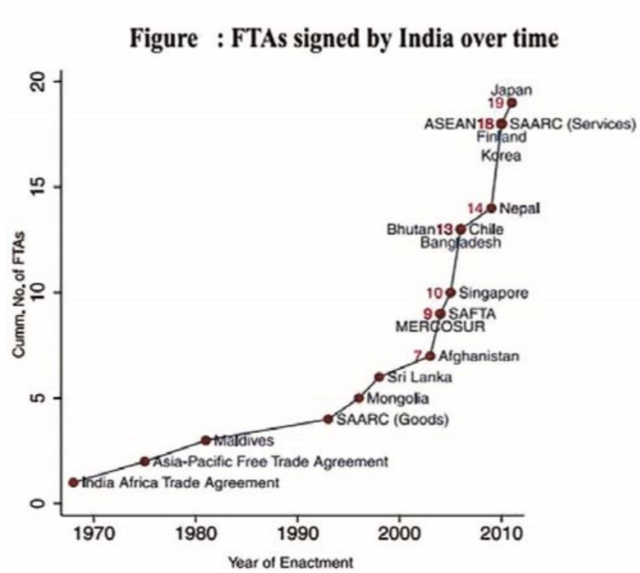
Access to the global markets and enable export-led model of Development

Integration into Global value Chains leading to employment creation, enhanced efficiency, higher GDP growth rates.

Trade Liberalisation with Flexibility: The FTAs help reduce tariffs with a chosen trade partner in a calibrated manner with tariff reductions spread over time. Further, the partner country would also be required to reciprocate by reducing the tariffs.



INDIA AND FREE-TRADE AGREEMENTS



INDIA'S EXPERIENCE WITH FTAs

Positive Impacts:

India's Trade with FTA partners: India's total trade has increased with each FTA partner in post-FTA phase.

Structure of Imports and Exports: FTA partners have been able to provide for high quality raw materials. Further, India's exports are primarily accounted for by non-raw materials with respect to each FTA partner.

Trade in Services: India's trade in services has increased with some of the FTA partners such as Japan, South Korea, Malaysia etc. Some of the sectors that have been benefitted include technology (Computer Software), telecommunication, finance, tourism etc.

FDI in FTA Partners: Indian companies have been established in most of the major FTA partner countries of India leading to greater exports from India.

ADVERSE IMPACTS

Structure of Trade: FTAs have led to increased imports and exports. However, imports are much higher than exports. Further, India's exports to FTA countries has not outperformed overall exports to rest of the world

Widening Trade Deficit: India's trade deficit with ASEAN, Korea and Japan has widened post-FTAs.

Sector-Wise Impact of FTAs: Apart from the widening trade deficit, the quality of trade has also deteriorated after signing of FTAs. Out of 21 important sectors, 13 sectors have been adversely affected by higher imports as compared to exports. Some of these affected sectors are minerals, leather, textiles, gems and jewellery, metals, vehicles etc.

Under-Utilised FTAs: Utilisation rate of FTAs by exporters in India is very low (between 5 and 25%).

WHAT SHOULD BE DONE THEN?

The Surjit Bhalla Committee has given the following recommendations for effective utilization of FTAs:

Review of Existing FTAs: India must undertake a comprehensive review of the existing FTAs in terms of benefits to various stakeholders like industry and consumers. If necessary, these FTAs have to be renegotiated to ensure that India's interests and concerns are adequately addressed.

Improve Trade Competitiveness: Exports in India are constrained by improper access to factors of production, namely, land, labour and capital in India and high cost of these factors of production.

Protect the domestic Market by laying down strong and effective technical regulations to avoid importing cheap quality goods. At the same time, we must use the trade safeguards such as Anti-dumping duties and safeguard duties to protect our domestic Industry.

Approach towards Services: With respect to FTA in Services, India has so far excessively focussed on the movement of Natural persons which would enable Indian professionals (such as IT, Educators, doctors etc) to render their services in the FTA partner countries. However, going forward, we need to go beyond and negotiate with the FTA partners to allow Indian service-based companies to set up their bases in their country.

Better Inter-Ministerial Coordination: The ministry of Commerce and Industry must hold regular Inter-ministerial meetings to improve the coordination between various ministries.

Facilitation for MSMEs: Launch nation-wide sensitisation scheme whereby the MSMEs can be explained about the potential of FTAs.

Launch FTA Utilisation Mission: The MSMEs are often unable to take advantage of the FTAs due to lack of Information about the FTAs. Hence, there is a need to launch nation-wide sensitisation scheme whereby the MSMEs can be explained about the potential of FTAs.

Reorient SEZs (Baba Kalyani Committee): The SEZs should be renamed as 3 E's- Employment and Economic Enclaves. Focus should not only be on boosting exports, but also on employment creation and GDP growth rate. Incentives given to companies in SEZs should depend upon factors such as Value addition, Technology adoption etc. This would encourage the companies to innovate and compete at the global level.

Integrate Government initiatives such as One-District One Product, RoDTEP Scheme etc. into FTAs to push for exports.

►DECODING INDIA'S REFUSAL FOR JOINING RCEP

India has decided to remain outside the proposed RCEP trade agreement which was negotiated between ASEAN and its six Free trade partners. India has officially stated that the present form of the RCEP Agreement does not fully reflect the basic spirit and the agreed guiding principles of RCEP.

BENEFITS OF INDIA JOINING RCEP

Effective utilisation of FTAs: RCEP provides an avenue for India to complement India's existing free trade agreements with the ASEAN and some of its member countries.

Greater Regional Integration: Enable India to strengthen its 'Act East" Policy ; Quite important because India is not a party to two important regional economic blocs - Asia-Pacific Economic Cooperation and the

Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

Harness Comparative Advantage in areas such as ICT, Education and Healthcare.

Attract Investment from RCEP member countries

CHALLENGES AND CONCERNS WITH INDIA'S MEMBERSHIP OF RCEP

Adverse Trade Deficit: India has around $104 billion trade deficit with the RCEP member countries, which is 65% of India's total trade deficit. The RCEP agreement forced India to eliminate tariffs on almost 90% of the imported goods over the next 15 years. Hence, India was apprehensive that RCEP agreement would lead to increase in its trade deficit, particularly with countries such as China.

Adverse impact of previous FTAs: The FTAs with Japan and South Korea have led to substantial increase in import of goods into the domestic market leading to adverse impact on domestic manufacturing.

Base Year for Eliminating Tariffs: The RCEP member countries demanded that the base year should be 2013 while India demanded that the base year should be 2019. It is to be noted that India has increased import duties on several products between 2014 and 2019 and hence adoption of 2019 as the base year would have led to lower reduction in the customs duties and offered protection to the Indian domestic Industry.

Ratchet Clause: Ratchet means a screw which turns only in one direction, up or down and not both ways. This concept is proposed to be applied in RCEP which will disallow the member country to increase the import duties, once reduced. The Indian Government wanted the RCEP member countries to adopt safeguard mechanism which should enable the countries to increase the tariffs on certain products when there is a surge in imports. However, the RCEP member countries wanted that once the tariffs on products is raised, it should not be allowed to reduced.

Adoption of liberalized Rules of Origin would have affected India's interests.

Application of Investors to State Dispute Settlement (ISDS) mechanism: Under multilateral trade and investment agreements such as RCEP, a third party forum is normally provided for to resolve such disputes. This means that the relevant laws and judiciary in India will no longer be able to intervene in such disputes.

Provisions against Data Localization in the e-commerce chapter in the RCEP goes against India's interests.

WAY FORWARD

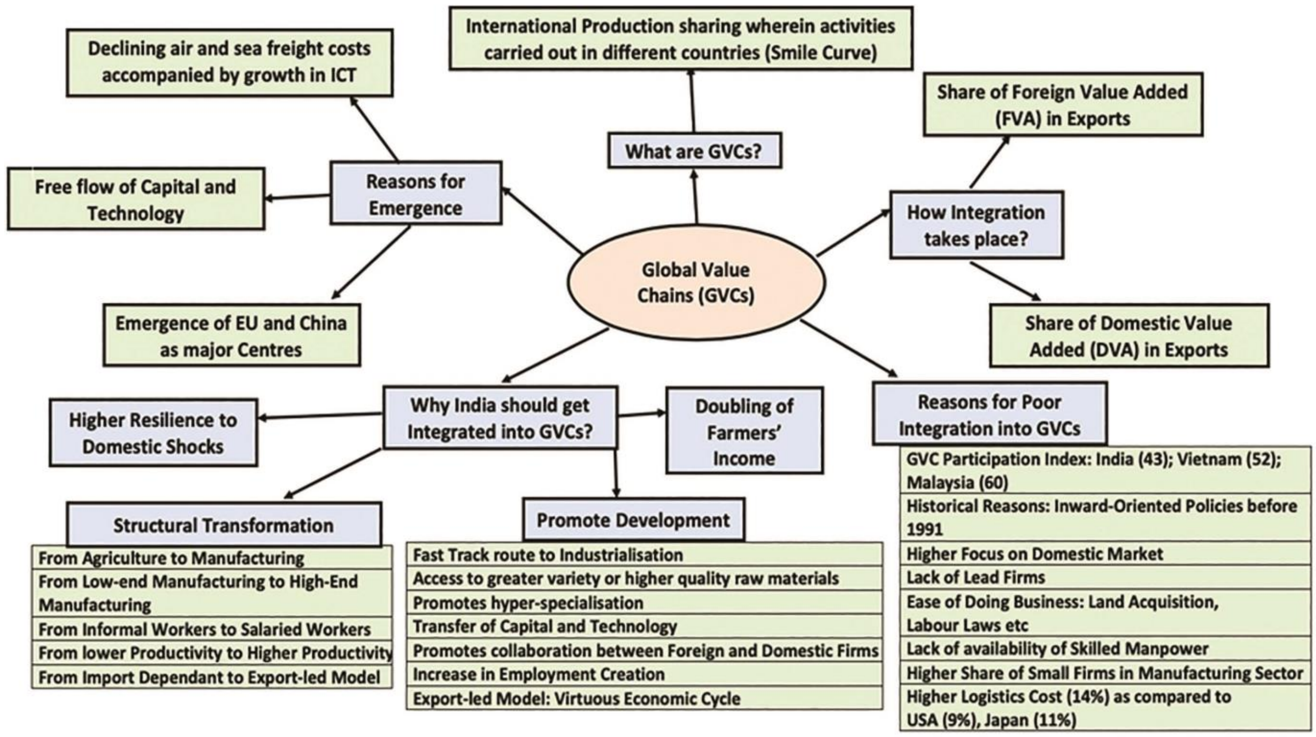
Firstly, India has already signed FTAs with almost 12 countries which are part of RCEP. This includes 10 ASEAN Countries, Japan, and South Korea. Hence, in the short-run, India can afford to remain outside RCEP until its core interests and concerns are addressed.

Secondly, in the medium and long run, India must focus on enhancing its export competitiveness by addressing the infrastructural bottlenecks, build manufacturing capabilities, improving logistics supply chain, focus on R &D etc.

Thirdly, to realize vision of $ 5 trillion economy, India needs to get integrated into regional trading agreements (including RCEP). Hence, it should keep engaging with the RCEP countries to ensure that its demands are taken into consideration.

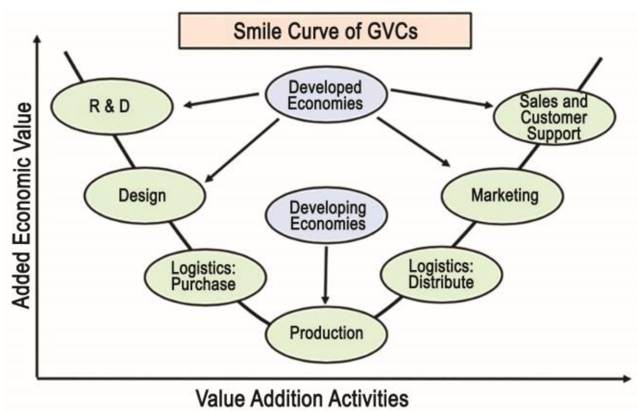
►GLOBAL VALUE CHAINS: A TOOL FOR STRUCTURAL TRANSFORMATION OF ECONOMY

In the Budget 2020-21, the Finance Minister had highlighted the need for "Assemble in India" on the lines of "Make in India". In a way, this was a call for greater Integration of Indian Economy with the Global Value Chains (GVCs) to reap multiple benefits. Integration into GVCs has the potential to bring about structural shift in our economy- From Agriculture to Manufacturing, From Low-end Manufacturing to high-end Manufacturing, From Self-Employed and Casual Workers to Salaried Workers, from lower Productivity to higher productivity and overall a change in our orientation from being inward to outward



WHAT ARE GLOBAL VALUE CHAINS?

GVCs refer to the full range of activities (design, production, marketing, distribution and support to the final consumer, etc) that are divided among multiple firms and workers in multiple countries to bring a product from its conception to its end use and beyond. The Global value Chains (GVCs) have been developed for number of products such as Automobiles, Pharmaceuticals, Textiles, Electronics, Chemicals, Gold and Jewellery etc.



WHY SHOULD INDIA GET INTEGRATED INTO GVCs?

Economic Growth and Development: According to World Bank, 1 percent increase in the level of GVC participation increases average productivity by 1.6 percent and per-capita Income by more than 1% in long-run. This is on account of following reasons:

- Provides fast track route to Industrialisation since there is no need to build entire supply chain right from scratch.
- Better access to a greater variety of higher-quality or less costly intermediate inputs
- No need for firms to focus on entire supply chain and instead focus on specialised tasks leading to Hyper-specialisation.
- Transfer of technology and know-how from the foreign partners.
- Promotes collaboration rather than competition between Domestic and Foreign Firms wherein each of them focusses on specialised task in the production cycle. Both Domestic and Foreign firms collaborate with each other in order to minimise the costs and maximise the profits.
- Knowledge Intensive firms in other countries would share product innovations with Indian Firms and thus provide scope for the Indian firms to move higher up the value chain
- Increase in Employment creation and Exports

Increased Job Creation and Labour Welfare:

- Potential to provide fillip to Manufacturing sector leading to structural change in Indian Economy.
- Shift in the Workers from agriculture to Manufacturing.
- Higher Paying Jobs accompanied by Social Security benefits

- Induce shift in type of employments from Self-employed and Casual workers towards Salaried Workers

Socio-Economic Transformation: GVCs support employment of not just men, but also women. Notably in the apparel and electronics sectors, where assembly of many small parts must be done manually, firms report preferences for female employees because of the high levels of dexterity required. Thus, as seen in Bangladesh, higher employment creation for Women would have following benefits:

- Higher Expenditure on Girls' Education
- Decline in IMR and MMR
- Political, Economic and Social Empowerment of Women

Doubling of Farmers' Income: Even though, India is one of the largest producers of Agri-commodities, its share in global exports stands at merely 2.2% (9th Rank). This clearly highlights India's poor Integration into Global agricultural supply chains. Hence, greater integration would translate into expanded market access and higher prices for the farmers leading to doubling of their income levels.

Higher Resilience: According to OECD, Integration of economies into GVCs lead to resilience, stability and flexibility in their production network and hence capable of responding to domestic shocks. On the other hand, economies which are less integrated into GVCs are more vulnerable to shocks and hence may see decline in economic activity and fall in National incomes in response to domestic shocks

INDIA'S POOR INTEGRATION INTO GVCs

According to OECD-WTO's TiVA (Trade in Value Added) database, India's GVC participation index stands at 43, as compared to 52 for Vietnam and 60 for Malaysia. The GVC participation index displays a country's integration into the GVC and is the sum of forward and backward linkages divided by total exports. The foreign value added of India's Gross Exports (Forward Linkages) has reduced from 25% (2012) to 16% (2016).

Some of the reasons for India's poor Integration into GVCs are as given below:

- **Historical Reasons:** Inward-looking Industrial policies with focus on State-led Industrialisation, Import-substitution, Licence-raj System etc.
- **Lack of Lead Firms in India:** The lead firms are the firms that establish supply chains across the world and hence major drivers of GVCs. For example, in India, Tata Motors (Automobile) and Ranbaxy (Pharmaceuticals) have emerged as lead firms by attracting foreign Investment, transferring technology, establishing supply chains etc. However, there is a need to have such lead firms in almost all sectors.
- **Higher Focus on Domestic Market:** Indian Firms have traditionally focussed on Indian Domestic Market since it is quite large. However, they have failed to realise that integration into GVCs would give them much wider market.
- **Inward Oriented FDI Policy:** Countries such as China and Vietnam have been inviting MNCs with GVC linkages to their countries leading to their Integration. However, India has so far not given due emphasis on this aspect of FDI policy.
- Lack of Focus on R&D leading to limited knowledge transfer
- Lack of access to Finance- Higher Dependence of Banks, Under-developed Bond Market etc.
- Inability of the Government to bring about long-pending Labour Reforms
- Lack of availability of skilled manpower in crucial sectors Electronics.
- Higher Logistics Cost (14%) as compared to USA (9%) and Japan (11%) - leading to Uncompetitive Indian exports.
- Poor Focus on Quality due to higher share of small-scale enterprises
- Inverted Duty structure making import of Finished Goods cheaper

WAY FORWARD

The Government should address the various constraints highlighted above in order to successfully integrate Indian Economy into GVCs. India should target the entire production cycle in the Smile Curve of the Global Value Chains (GVCs). In some of the selected products such as Automobile, Pharmaceuticals etc, India needs to focus on high-end activities such as Conceptualisation and Design in order to reap its expertise in R&D, technology. India must also focus on lower end of the curve (Production and Assembly) to give fillip to "Make in India" and "Assemble in India".

►CRITICAL ANALYSIS OF 1991 LPG REFORMS

July 2021 marks the 30th anniversary of the LPG Reforms. So, far, the LPG reforms has been a mixed bag for India. On one hand, the GDP size of India has increased from $275 bn to $ 2.9 trillion. However, on the other hand, the increase in GDP size has not been accompanied by transformative changes in the Indian Economy.

Agricultural Development: The average growth rate of Indian agriculture is below the targeted growth rate of 4% and is way below the double-digit growth rate of the service sector. Despite being the one of the largest producers of food grains, India's share in global export of agricultural commodities has remained stagnant at 2% (9th Rank). Similarly, the import of cheaper agricultural commodities has adversely affected the income levels of the farmers. This clearly shows that the farmers in India have not able to get benefitted from LPG reforms.

Stagnation in Manufacturing sector: The share of manufacturing sector to India's GDP has remained stagnant at 16-17% since 1991 reforms. Instead of focussing on labour intensive industries, the manufacturing sector has come to be dominated by capital intensive Industries. The failure of the LPG reforms to promote manufacturing sector is the biggest loss for the Indian Economy.

Jobless Growth: The employment elasticity is hardly around 0.1 which means every 1% increase in GDP growth rate leads to 0.1% increase in employment creation. Apart from low quantity of jobs, concerns have also been raised with respect to poor quality of jobs. 90% of India's workforce is employed in informal sector which is characterised by low wages, poor productivity and lack of access to social security benefits. Hence, there is a need to create high-paying, high-productivity formal sector jobs.

Lack of Inclusive Growth: India has failed to prevent concentration of wealth and provide for equitable distribution of income. For instance, as per Credit Suisse, 1% of the wealthiest in India have increased their share in wealth from 40% in 2010 to 60% in the last five years. The richest 10% in India own more than 4 times the wealth than the remaining 90%. Going forward, richest 10% in India would take away the majority share of $ 5 trillion economy.

Provision of basic services: The Government has failed to allocate sufficient financial resources for provision of basic goods and services. For instance, India's expenditure of 3% on education is much below the target of 6%. Similarly, expenditure on health has remained quite lower at 1.5% as against the mandated 3%.

CONCERNS WITH INDIA'S EXTERNAL SECTOR

- India's share in the world's exports has remained stagnant at 1.6% in the last decade.
- India's export basket is dominated by Capital intensive goods such as Petroleum products, Gems, Jewelry etc. (rather than Labor intensive goods such as Textiles, Leather etc.)
- Undoubtedly, the forex reserves have increased to all time high. However, it is mainly on account of increase in volatile FPI inflows rather than on account of export surplus.
- Unlike China, India has failed to get integrated into Global value chains (GVCs).

Poor Innovation Ecosystem: The R&D Expenditure as % of GDP at 0.7% has remained stagnant in the last 2 decades. Unlike developed economies, the R&D expenditure in India is mainly driven by public sector. The private sector investment in R&D needs to be substantially enhanced.

►WTO REFORMS

IMPORTANT TERMS IN NEWS

Special and Differential Treatment give developing countries special rights and allow other members to treat them more favourably. The special provisions include longer time periods for implementing agreements and commitments, support to help developing countries to build the infrastructure to undertake WTO work etc. Further, it also enables the developing countries to provide higher subsidies as compared to developed countries as seen under the Agreement on Agriculture (AoA)

Plurilateral and Multilateral Agreement: Multilateral Agreements are adopted through consensus among all the member countries. The provisions of the multilateral agreements are applicable to all the member countries. Further, such agreements may decide to incorporate special and differential treatment for the benefit of poor and developing economies. Most of the WTO agreements such as AoA, GATS, TRIPS etc are multilateral agreements which the member countries are obliged to follow.

Plurilateral agreement is an agreement between limited number of WTO member countries wherein the countries would be given the choice to agree to new rules on a voluntary basis. In other words, the provisions of plurilateral agreement would not be applicable to all the member countries. Examples of Plurilateral agreements under WTO include Trade in civil aircraft; Government Procurement; Bovine meat; Dairy products.

ISSUES UNDER THE WTO NEGOTIATIONS

Plurilateral Vs. Multilateral Agreements: SInce the multilateral agreements are consensus driven, normally the trade negotiations under multilateral framework tend to be slow paced and lead to unnecessary delay. However, the good aspect about the multilateral agreements is that they take into account the special needs and interests of poor and developing countries. In this regard, the debate has arisen between the developed and developing countries with respect to the nature of trade negotiations under the WTO.

The developed countries have put forward four plurilateral agreements in the areas of e-commerce, investment facilitation, MSME and gender. However, developing countries led by India have staunchly opposed the plurilateral agreement and instead pushed forward for the continuation of multilateral framework under WTO.

Agreement on Fishery Subsidies: The WTO member countries are presently negotiating a multilateral treaty of Fishery Subsidies. This agreement seeks to prohibit certain forms of fisheries subsidies that contribute to overcapacity and overfishing. Some of the developed countries such as USA have been insisting that larger developing countries like India and China should not continue to get special and differential treatment. However, India has argued that special and differential treatment should be built into the fisheries subsidies agreement.

Agreement on E-Commerce: The developed countries led by USA have put forward a number of proposals which include tackling barriers that prevent cross-border sales; addressing forced data localization requirements and permanently banning customs duties on electronic transmissions, among others. India has clearly stated that it is against any binding rules in e-commerce.

Permanent Solution to Public Stock holding: India has been demanding a permanent solution on Public stockholding in order to implement National Food Security Act. At the Bali ministerial conference in December 2013, India secured a "peace clause". Under it, if India breaches the 10% limit on subsidy under AoA, other member countries will not take legal action under the WTO dispute settlement mechanism. Further, in 2014, India forced developed countries to clarify that the peace clause will continue indefinitely until a permanent solution is found.

DEFINITION OF DEVELOPING COUNTRY UNDER WTO

Background: There are no WTO definitions of "developed" and "developing" countries. Members announce for themselves whether they are "developed" or "developing" countries. However, other members can challenge the decision of a member to make use of provisions available to developing countries. The Developing countries enjoy special and differential provisions such as longer time periods for implementing agreements and commitments.

USA's Opposition: The US has been demanding reform in the Developing Country status. US believes that even some of the developed economies such as South Korea, China, Hong Kong, Kuwait, Singapore, UAE etc. have been claiming the status of developing country. US has also questioned India's status of developing country in the WTO.

DEFUNCT DISPUTE SETTLEMENT BODY

The sanctioned strength of the Appellate Body (AB) of WTO's Dispute Settlement Mechanism is seven members and these members are appointed through consensus among the member countries.

The quorum required to decide on disputes is 3 judges. The US government believes that AB is biased against it and has criticized it for being "unfair". Consequently, US has so far been blocking appointment of members to the Appellate Body (AB) and it is left with only one judge which is below the quorum of 3 judges needed to hear appeals.

►CONTROVERSY OVER INFORMATION TECHNOLOGY AGREEMENT (ITA)

INFORMATION TECHNOLOGY AGREEMENT (ITA-1)

The Information Technology Agreement (ITA) is a plurilateral agreement under the WTO which came into force in 1997. It presently covers 81 WTO member countries which account for approximately 97 per cent of world trade in information technology products. Every member country signing this agreement is required to eliminate tariffs on IT products listed in the Annex A and Annex B of the IT Agreement. Some of the IT products covered in this agreement include computers laptops, mobile phones, set up boxes, semiconductors, telecommunication equipment and parts etc. ***India is a signatory to ITA-1 and hence it has eliminated customs duties on 217 IT products over a period of time.***

INFORMATION TECHNOLOGY AGREEMENT (ITA-2)

In 2015, some of the member countries agreed to expand the products covered by the Information

Technology Agreement by eliminating tariffs on an additional list of 201 products. This was done on account of new advances in the field of information technology. The new accord covers new generation semi-conductors, semi-conductor manufacturing equipment, optical lenses, GPS navigation equipment, and medical equipment such as magnetic resonance imaging products and ultra-sonic scanning apparatus. ***However, it is to be noted that India has not signed ITA-2 since it would have an adverse impact on domestic manufacturing due to cheaper imports.***

WHAT'S THE PRESENT CONTROVERSY ALL ABOUT?

India's Viewpoint: The elimination of customs duties on IT products under the ITA-1 has adversely affected the domestic manufacturing of IT components in India. In order to boost domestic manufacturing of certain IT products, customs duties on certain products was increased to around 20% in Union Budget 2018-19. India has stated that the IT goods in question do not fall under the ITA-1 but under ITA-2. Since India is not a signatory to ITA-2, there is no obligation on India to reduce customs duty on goods.

Viewpoints of WTO Member Countries: The WTO member countries have raised concerns with respect to imposition of customs duty on IT products by India. These countries have alleged that IT products for which duties were increased fall under ITA-1 and not ITA-2.

►BREAKDOWN IN WTO DISPUTE SETTLEMENT MECHANISM

The WTO appellate body has become defunct after USA consistently blocked the appointment of Judges to the appellate body. The break down in the dispute settlement mechanism is a huge blow to the role of WTO which is facing the threat of trade war and rising protectionist policies of developed economies.

UNDERSTANDING DISPUTE SETTLEMENT MECHANISM

Settling disputes is the responsibility of the Dispute Settlement Body (DSB) which consists of all WTO members.

First stage: Consultation (up to 60 days) to settle the trade disputes through conciliation.

Second stage (up to 1 year): Failure of consultations leads to formation of Dispute Panel by the DSB. The report of the panel can be rejected only through consensus among the members of the DSB.

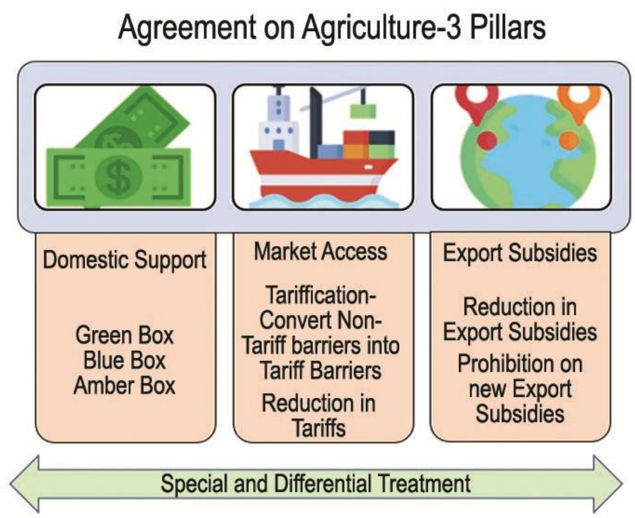
Appeal Stage: Either side can appeal a panel's ruling. Each appeal is heard by three members of a permanent seven-member Appellate Body set up by the Dispute Settlement Body. The members of the Appellate Body have four-year terms. The appeal can uphold, modify or reverse the panel's legal findings and conclusions. The Dispute Settlement Body has to accept or reject the appeals report and rejection is only possible by consensus.

PRESENT CONTROVERSY

- The sanctioned strength of the Appellate Body (AB) is seven members and these members are appointed through consensus among the member countries. The AB must have quorum of 3 judges to hear a particular case.
- The US Government believes that AB is biased against it and has criticised it for being "unfair". Consequently, US has so far been blocking appointment of members to the Appellate Body (AB).
- Since December 10, 2019, the AB has been left with only 1 Judge and the quorum required to hear a case is minimum 3 judges. Hence, the WTO appellate body has become dysfunctional.

►AGREEMENT ON AGRICULTURE (AOA)

The Agreement on Agriculture (AoA) basically aims to facilitate international trade in agricultural goods by putting a cap on the agricultural subsidies given by the member countries. This agreement stands on 3 pillars viz. Domestic Support, Market Access, and Export Subsidies.



Current Issues with the AoA: To implement National Food Security Act (NFSA), the Government is required to procure more food grains by announcing MSP. On account of this, Government would be required to declare subsidies over and above the limit specified under AoA. This was being challenged by the developed countries such as USA, which wanted India to stick to subsidy limit imposed under AoA.

At the Bali ministerial conference in December 2013, India secured a “peace clause". Under it, if India breaches the 10% limit on subsidy under AoA, other member countries will not take legal action under the WTO dispute settlement mechanism.

Further, in 2014, India forced developed countries to clarify that the peace clause will continue indefinitely until a permanent solution is found. Presently, India has been demanding a permanent solution on Public stockholding in order to implement National Food Security Act.

INDIA'S ARGUMENT AGAINST SUBSIDIES UNDER AoA

- The percentage limit on the Subsidies is quite deceptive. In terms of absolute value, the developed economies have been providing subsidies far higher than India.
- The limit on the subsidy does not factor in the Inflation. It is calculated as the value of production in 1986-88. Since then, the prices of agricultural commodities have increased.
- Under the Green Box Subsidies, direct income support to the farmers (not linked to specific product) is allowed. This has been misused by countries such as USA. The direct cash transfers to the farmers in USA account for almost 50% of its agricultural value production.
- Procurement of the Commodities under MSP regime is not for boosting agricultural exports, rather it is for meeting food security needs of Indian Citizens. Hence, procurement of commodities for ensuring food security should not be included in the Amber Box, rather it should be included in the Green Box.

Hence, India must address the historical imbalances and ensure a rule-based, fair and equitable international trade through AoA.

►IMF QUOTA REFORMS

ABOUT INTERNATIONAL MONETARY FUND (IMF)

Both IMF and World Bank came into being after the Bretton Woods Conference which was held in 1944 after the Second World War. These institutions were mainly set up in order to ensure global financial stability and to promote growth and development. The role of the World Bank is to give loans to the poor and developing countries to promote growth and development. The IMF's main role is to give loans to the member countries which are facing Balance of Payment (BoP) crisis.

ABOUT QUOTA

The Quotas determine the maximum amount of financial resources a member is obliged to provide to the IMF. The financial contribution of each member country is mainly determined based on 4 indicators- Size of GDP (50%), Openness (30%), Economic Variability (15%) and International Reserves (5%). The Quotas are denominated in Special Drawing rights (SDRs) which is the IMF's unit of account.

The Quotas in the IMF also determines the member country's financial and organisational relationship with the IMF in the following manner:

1. **Voting Power:** The Quota also largely determines the voting power of the member countries.
2. **Borrowing Limit:** The Quota also determines the amount of loans which a member country can avail from the IMF. For example, presently the member countries are allowed to borrow up to 145% of its quota on annual basis and 435% cumulatively.

HOW DOES THE QUOTA REVIEW WORK?

- The IMF's Board of Governors usually undertakes the review of the Quotas at regular intervals (usually once in 5 years). Any changes in Quota has to be approved by 85% majority of the total votes and a member's quota cannot be changed without its consent. During the 14th Quota review in 2010, it was decided to increase the quotas of the developing countries by shifting more than 6% of the quota shares from the over-represented countries to the under-represented countries.
- Subsequently, India's quota and voting rights have increased to 2.76% and 2.64% respectively. The USA has the highest quota and voting rights at 17.46% and 16.52% respectively.
- Presently, the top 10 countries with the highest quota and voting rights are USA, Japan, China, Germany, France, UK, Italy, India, Russia and Brazil in the descending order.

►DATA LOCALISATION- PROS AND CONS

IMPORTANCE OF DATA IN NEW GLOBAL ORDER

Data is considered to be the new oil. The technological giants such as Apple, Amazon, Facebook, Google, Microsoft etc have been harnessing the data generated by the users to make huge profits. The advent of Industrial revolution in Britain enabled it to become superpower and eventually it went on to colonize other countries across the world. Similarly, the data is considered to be the necessary ingredient of the Industrial Revolution 4.0.

Presently, USA and China have already taken lead in terms of Industrial revolution 4.0 by focusing on Big data and Artificial Intelligence (AI). Because of this, India would be required to be dependent on these two global digital superpowers in future. This would considerably compromise our economic and political independence leading to ***Digital Colonization of India.***

DATA LOCALIZATION- PROS AND CONS

Data localization refers to storage of data on any device that is physically present within the borders of a specific country where the data gets generated. In case of India, the Draft E-Commerce policy has mandated for the data localization norms for the e-commerce companies such as Flipkart, Amazon etc. On Similar lines, the RBI has mandated that all the payment system operators such as Mastercard, Visa etc. should compulsorily store the payments related data in the servers which are physically based in India.

BENEFITS OF DATA LOCALIZATION:

Data as Public Good: The Economic Survey 2018-19 has highlighted that the data generated by the Indian users has to be accessible by the people and ultimately used for the benefit of people and that is why the chapter has been aptly titled as "Data of the People, by the People, for the People"; Promotes evidence based policy making in order to improve the education, health and various dimensions of human development.

Enforcement: Enable law enforcement officers to access information required for the detection of crime as well as in gathering evidence for prosecution.

Reducing Vulnerabilities: A large amount of data is transmitted from one country to the other via undersea cables which increases the risk of vulnerability of the internet and cross-border transfer of data.

Thrust to Industrial Revolution 4.0: Data localization norms would force the companies to store their data in India giving a much needed push to Industrial Revolution 4.0.

Preventing Foreign Surveillance: A significant portion of the data collected and stored by global MNCs in other countries increases the scope of foreign surveillance.

CONCERNS RELATED TO DATA LOCALIZATION

Increase in Compliance Cost: Presently, some of the Indian companies store their data in servers located in the other countries at much cheaper prices. The data localization norms may make it costlier for the Indian companies to create necessary digital infrastructure to store the data within India.

Monopolization of Data: Data Localization would require huge investment in creation of digital infrastructure which can be done only for large MNCs. However, the small and medium sized businesses would have to be dependent upon the infrastructure set up these global MNCs in India.

Cyber Threat: Forcing the companies to store data locally deprives them of the option of distributing information across servers in multiple locations, making it more vulnerable to cyber threats.

Issues related to Privacy: It is to be noted that data localization may not be able to completely eliminate cyber-attacks. Even when, data is stored locally, it is prone to cyber-attacks leading to data breach and loss of privacy.

►INTERNATIONAL LABOUR ORGANIZATION (ILO)

In 2019, the ILO celebrated its 100th anniversary. In this regard, ILO and its various labour conventions, including Convention No. 182 become quite important for the UPSC exam.

ABOUT INTERNATIONAL LABOUR ORGANIZATION (ILO)

Establishment and its Role: The ILO was created in 1919 as part of the Treaty of Versailles after the end of First World War. It is a United Nations agency that sets international labour standards and promotes social protection and work opportunities for all. It is headquartered in Geneva, Switzerland.

Unique Structure of ILO: Unlike other UN specialized agencies, the ILO has a tripartite governing structure that brings together governments, employers, and workers to set labour standards.

How ILO Works? The ILO accomplishes its work through three main bodies which comprise governments, employers and workers' representatives:

- **International labour Conference**: It sets the International labour standards and the broad policies of the ILO. It meets annually in Geneva and it is also as international Parliament of labour.
- **Governing body**: It is the executive council of the ILO.
- **International Labour Office**: It is the permanent secretariat of the International Labour Organization.

Supervision of Labour Standards: The ILO regularly examines the application of standards in member states and points out areas where they could be better applied. If there are any problems in the application of standards, the ILO seeks to assist countries through social dialogue and technical assistance.

Reports published by ILO:

- World Employment and Social Outlook
- Global Wage Report
- World Social Protection Report

INTERNATIONAL LABOUR STANDARDS

International labour standards are legal instruments setting out basic principles and rights at work. They are either **Conventions (or Protocols)**, which are legally binding international treaties that may be ratified by member states, or **Recommendations**, which serve as non-binding guidelines. In many cases, a Convention lays down the basic principles to be implemented by ratifying countries, while a related Recommendation supplements the Convention by providing more detailed guidelines on how it could be applied.

8 Fundamental ILO Conventions are:

ILO Convention Name	Convention Number
Freedom of Association and Protection of the Right to Organise	87
Right to Organise and Collective Bargaining Convention	98
Forced Labour Convention	29
Abolition of Forced Labour Convention	105
Minimum Age for Admission to Employment	138
Worst Forms of Child Labour Convention	182
Equal Remuneration Convention	100
Discrimination in Respect of Employment and Occupation	111

India and ILO: India is a founding member of ILO. India has so far ratified 47 ILO Conventions. Out of the 8 Fundamental Conventions highlighted above, India has ratified 6.

►MODEL BILATERAL INVESTMENT TREATY

WHAT IS BILATERAL INVESTMENT TREATY?

Bilateral investment Treaties (BITs) are agreements between two Countries for the reciprocal promotion and protection of investments in each other's territories by individuals and companies situated in either State. BITs encourage foreign investors to invest in a State and there by contributing towards overall developments and advancements of the economy.

Some of the important features of the BITs are:

- **Fair and Equitable Treatment (FET)**: Mandates States to have a stable and predictable legal framework regulating investments which meets the reasonable expectations of the investors.
- **Full Protection and Security (FPS)**: Mandates States to provide full protection and safety to foreign investments.
- **National Treatment**: The foreign investors should be treated at par with the domestic investors.
- **Most Favourable Nation Treatment (MFN)**: Concession extended to foreign investor of a particular country would be extended to foreign investors of other countries.
- **Expropriation (Taking over property)**: Bars the state from expropriating the foreign investments except under exceptional circumstances.
- **Repatriation of Investment and Returns**: Mandates the states to provide unrestricted power to the foreign investors to repatriate their investments and returns.
- **Investor State Dispute Resolution (ISDS)**: Foreign investors can directly initiate arbitration proceeding against a State without approaching its own government. To handle such a dispute, an ad-hoc tribunal may be set up in accordance with the Arbitration rules of the United Nations Commission on International Trade Law.

REASON FOR TERMINATION OF BITs

The BITs signed by India gave extensive protection to the foreign investment with scant regard for state's interests based on the neoliberal model. For example, a number of foreign corporations slapped ISDS notices against India challenging a wide array of regulatory measures such as the imposition of retrospective taxes (Vodafone case),cancellation of spectrum licences and revocation of telecom licenses.

These ISDS cases against India led to a fundamental rethink and review of BITs in India leading to the adoption of Model BIT in 2016.

IMPORTANT PROVISIONS OF MODEL BIT

- **Enterprise based definition of investment**: The asset-based definition of the investment under the earlier BITs has been replaced by Enterprise based definition under the model BIT. Asset based definition considers every kind of asset – both movable and immovable including the IPRs as investment and gives protection under treaties. Moving away from an asset-based approach to an enterprise-based approach aims at narrowing the scope of investments to be protected and thus seeks to reduce the number of BIT claims that can be brought against India.
- **Exclusion of MFN treatment**: In recent years, some foreign investors have sued India arguing that they have to get the same beneficial treatment given to companies from other countries. Accordingly, India has dropped MFN Clause from the Model BIT.
- **Conditions for initiating arbitrations at international arbitrations**: The Model BIT stipulate that the aggrieved investor should use all local remedies as well as negotiations and consultations before initiating arbitrations against the host State. Investor can use outside remedies only five years after resorting to all domestic arrangements.
- **Corporate Social Responsibility**: The Model BIT mandates foreign investors to voluntarily adopt internationally recognized standards of corporate social responsibility.

►CAPITAL ACCOUNT CONVERTIBILITY- PROS, CONS AND WAY FORWARD

RUPEE CONVERTIBILITY IN INDIA

Full Rupee Convertibility on Current Account: The Current Account under the Balance of Payment (BoP) includes various transactions such as Imports, Exports, Remittances, Gifts, Donations. On these transactions, India has adopted full Rupee Convertibility in 1993.

Partial Rupee Convertibility on Capital Account: Capital Account Convertibility (CAC) is not just the currency convertibility, but it also involves the freedom to invest in financial assets of other countries. The Committee on Capital Account Convertibility (1997) headed by Tarapore has given a working definition for the CAC - "CAC refers to the freedom to convert local financial assets into foreign financial assets and vice versa at market determined rates of exchange. It is associated with changes of ownership in foreign/domestic financial assets." So, it basically refers to easing of restrictions on movement of capital (such as FDI, FPI etc) from one country to another.

PROS AND CONS OF FULL RUPEE CONVERTIBILITY ON CAPITAL ACCOUNT TRANSACTIONS

Pros	Cons
• Easier access to Foreign Capital and technology due to greater ease for the foreign Investors. • Promote competition between domestic companies and MNCs • Internationalisation of Rupee- Rupee can easily be accepted in other countries. • Enable domestic Investors to invest in overseas market • Promote Financial Discipline since the Government must keep in check Fiscal Deficit and Public Debt to attract foreign Capital • Promote Employment opportunities and GDP growth.	• Higher Volatility in the Exchange rate due to sudden inflow and outflow of Foreign currencies. (1997 Asian Financial Crisis) • Higher Inflows of foreign Capital could lead to sudden appreciation in the value of Rupee and thus hurt Exports. • Greater chances of global risks affecting Indian Economy! Example: 2007-08 Global Financial Crisis) • Higher Foreign Debt • Outflow of Domestic Savings to other Countries. • No empirical link between Capital Account Convertibility and Economic Growth.

IS INDIA READY FOR CAPITAL ACCOUNT CONVERTIBILITY?

The Tarapore Committee has recommended that India should Capital Account Convertibility in a phased and gradual manner. At the same time, it has laid down some pre-conditions to be met for the introduction of Capital Account convertibility:

1. Eliminate Revenue Deficit and ensure Revenue surplus
2. Substantial part of Revenue surplus should be earmarked for meeting repayment obligations.
3. Strengthen the Regulation of Financial sector, including that of Banks. Reduce the NPAs of Banking sector and focus on reforms in Public Sector Banks (PSBs).
4. To meet import and debt service payments, forex reserves should be adequate enough.

5. The RBI should evolve policies to allow industrial houses to have stakes in Indian banks or promote new banks.

WHAT APPROACH SHOULD INDIA FOLLOW?

- Capital account liberalization should be regarded as a process and not an event i.e., it should be introduced in a phased and gradual manner.
- The degree and timing of capital account liberalization need to be sequenced with other reforms, such as strengthening of banking systems, fiscal consolidation, trade liberalization and the changing domestic and external economic environments.
- India must focus more on liberalising inflows as compared to outflows. Among the kinds of inflows, FDI should be preferred for stability, while excessive short-term external debt needs to be avoided.
- For outflows, the hierarchy for liberalization must be - Corporates first, followed by financial intermediaries, and finally individuals.

►ACHIEVING AATMA NIRBHAR BHARAT THROUGH PATENT BOX REGIME

PATENT BOX REGIME

Need for Patent Box Regime: The MNCs usually register their patents in low tax jurisdictions such as Singapore, Mauritius, Netherlands, Ireland etc. This is in spite of the fact that the new inventions may have been developed in some other countries such as USA, India, Germany etc. This is so because the income earned from the patents would be taxed in low-tax jurisdiction rather than in countries where the income is earned.

What Patent Box Regime does? Provides for a special tax regime for Intellectual Property (IP) revenues. In a Patent Box Tax Regime, a lower rate of tax is applicable for the income generated from licensing or transfer of intellectual property rights like patents. Such a regime has been adopted by countries such as UK, France, Spain etc. to incentivise R&D.

Patent Box Regime in India: Introduced through Finance Act, 2016. It provides for a concessional rate of tax at the rate of 10% on the gross amount of royalty earned through Patents. However, to be eligible for this benefit, the Patent must be developed and registered in India.

HOW PATENT BOX REGIME BENEFITS INDIA?

- **Enhance Expenditure in R&D:** The Investments in R&D measured in terms of Gross Expenditure on R&D (GERD) have shown a consistently increasing trend over the years. However, as percentage of GDP, GERD has remained stagnant at around 0.7% of India's GDP. It is much lower as compared to other countries- China (2.1%); USA (2.8%); South Korea (4.2%); Israel (4.3%) etc.
- **Increase in the Share of Private Sector Investment:** In most of the advanced economies, the major chunk of expenditure on R&D is borne by the private sector entities. However, in case of India, the major share of GERD (0.7% of GDP) is incurred by the Public Sector (0.4%). The share of private sector is hardly around 0.3% of GDP.
- **Increase in number of Patents:** The lower expenditure on R&D has in turn led to India's poor ranking on international indices such as International IP Index, Global Innovation Index and Global Competitiveness Report and hence the Patent Box Regime is expected to increase the filing of Patents in India.

WAY FORWARD

Patent Box Regime is expected to give a push to 'Make in India'. 'Start up India', 'Digital India' initiatives of the Government and thus promote Aatma Nirbhar Bharat. Considering the fact that more than 25 countries across the world have adopted Patent Box Regime, the Indian Government should improve the regime even further to promote R&D:

1. Concessionary tax regime should not only be limited to Patents, but also extended to other IPRs such as Copyrights, Trademarks etc.
2. Concessionary tax regime should also include the income accrued from the sale of manufactured products with embedded patented components.
3. Reduction in the time required to register patents.

►IPR WAIVER ON TRIPS AGREEMENT- PROS AND CONS

In Dec 2020, India and South Africa had asked for patent waiver to deal with CoVID-19.

Waiver on Patents: Any pharmaceutical company would be allowed to manufacture the vaccines, medicines without having patents or without entering into voluntary licensing agreements with the patent holder.

Mechanism for Waivers under WTO Agreements can be decided at the WTO Ministerial Conference through consensus among all the member countries. The waiver needs to contain a justification based on the exceptional circumstances. Waivers are reviewed by the Ministerial Conference annually until its termination.

BENEFITS OF PATENT WAIVER

Saving Lives: The vaccination coverage in advanced economies such as USA, UK etc. is more than 50%. However, in African countries, it is below 1%. In India, it is around 10%.

Public funded Research: Most of the pharma companies, particularly in advanced economies such as USA have received huge grants from their governments to undertake R&D to develop vaccines and medicines. Hence, since a significant chunk of R&D expenditure is indirectly incurred by the Government, it would be prudent to provide for temporary waiver on Patents.

Best bet to Fight Pandemic:

- Promote Global Cooperation to fight Crisis.
- Ramp up Production of Vaccines and Medicines and Flatten the Curve
- Equitable distribution of Vaccines
- Availability of Vaccines at affordable cost

Saving Livelihoods: Impact of Pandemic- 1.4% of Global Population pushed into extreme poverty; 90% of countries faced GDP contraction.

Current Mechanism for Exemptions for Patents such as Compulsory Licensing and Parallel Imports – Time Consuming and Complex Process

REASONS FOR OPPOSITION

Discourage Investment in R&D for undertaking further development in field of medicines, vaccines, and diagnostic tests. This is particularly of concern since the virus is mutating.

Flawed Assumption: The lower production and higher prices of medicines and vaccines is not entirely on account of Patent regime. Apart from Patents, other extrinsic factors such as availability of raw materials, Technological know-how, manufacturing capacity etc. are also hindering widespread availability.

Complexity in manufacturing of medicines and vaccines (such as mRNA Vaccines) prevent the pharma companies from entering into voluntary licensing agreements with the pharma companies in the poor and developing countries.

Lower profit Margins for the Pharma companies as they mainly sell vaccines to the Government at lower prices.

Problem of Quality controls as less capable pharma companies may try to manufacture patented products.

Extremely time consuming and complex as the waiver on Patents would have to be agreed through consensus among all the WTO member countries

THIRD WAY:

The Director General of WTO has proposed for a third way instead of Temporary waiver on Patents. Under the third way, there is a need to encourage pharma companies to enter into a greater number of voluntary licensing agreements with the Pharma companies based in poor and developing countries. For example, AstraZeneca has entered into voluntary licensing agreement with Serum Institute of India to manufacture Covishield. AstraZeneca can enter into a greater number of such voluntary licensing agreements with other pharma companies in India as well as other countries.

►BREAKING UP THE BIG TECH COMPANIES

The Digital Era has seen the growth of Big Tech Companies such as Google, Amazon, Facebook, Apple and Microsoft, which are combinedly known as "GAFAM". As of September 2020, the combined valuation of these platforms is more than $5 trillion. Over the past decade, the digital economy has become highly concentrated and prone to monopolization. Several digital markets such as social networking, general online search, and online advertising are dominated by just one or two firms.

HOW BIG TECH COMPANIES HAVE GAINED DOMINANT MARKET POSITION?

- **Role of Online Platforms as Gatekeepers**: As Amazon, Apple, Facebook, and Google have captured control over key channels of distribution, they have come to function as gatekeepers. Their role as gatekeepers also gives the dominant platforms to control the fates of other businesses.

  For example, in 2007, Google bought Android OS which is used for running the smart phones. Then, Google called upon the smartphone manufacturers to pre-install and give default status to Google's own apps such as Chrome, Google Map etc. Through Chrome, Google now owns the world's most popular browser, a critical gateway to the internet.
- **Acquisition of Competitors**: The Big tech companies have also resorted to acquisition of smaller competitors to retain their dominant market position.

For example, Facebook acquired WhatsApp and Instagram to continue its dominance in the field of social media.

- **Collection, storage and Analysis of Data:** The Big tech companies enjoy dominance with respect to amount of data collected by them. This in turn makes smaller companies to depend upon Google, Amazon etc. for advertising their products.
- **Discriminatory Practices:** Companies such as Amazon force their sellers to sell their products only on their platform. Further, companies such as Google give higher preference to the companies which place their advertisement with them.
- **Higher Economies of scale and Scope** also enable these Big Tech companies to have profits as compared to their smaller rivals.

HOW DOMINANCE OF BIG TECH HURT ECONOMY?

- **Hinders Innovation:** Competition in digital markets incentivizes incumbent firms and new entrants to build new technologies and improve business processes. In case of monopolisation, the incumbent firms lack the incentive to invest in research and development.
- **Data Privacy Issues**: Misuse of personal data of the users to make profits.
- **Hinders Start-up Ecosystem:** Monopoly enjoyed by deep-pocketed Big tech companies would prevent growth of start-up companies.
- **Affects Consumers:** Monopolised market is usually characterised by higher prices and poor quality of services.
- **Exercise pervasive influence on society and politics** which could affect process of democratisation. Take for instance, the role of social media in spreading fake news, hatred, communal disharmony etc.

WHAT MUST BE DONE TO DEAL WITH DOMINANCE OF BIG TECH?

Strengthening the Antitrust Laws: The anti-trust laws such as Competition Act, 2002 need to be strengthened; Empower Competition Commission of India to deal with abuse of dominant market position by Big Tech companies.

BREAKING UP THE BIG TECH

There are basically 3 proposals to reduce the dominance of the Big Tech by breaking them.

1. **Platforms should evolve into separate companies:** This proposal would break up tech companies by separating the underlying platform from the products and services sold on it. Google could no longer own Android and offer apps like Gmail, Maps, and Chrome. Amazon could no longer own the Amazon Marketplace and sell its own private-label goods. Apple could no longer own iOS and offer products like Safari, Siri, or Find My iPhone.
2. Restrict the number of products the Big Tech can offer
3. Reversal of past acquisitions which enabled Big Tech Companies to enjoy dominance.

►NEED FOR MADE IN INDIA APPSTORE

Abuse of Dominant Position by Google and Apple: Presently, there are more than 300+ app stores such as Google's play store, Apple's Appstore, Samsung's Galaxy store, Amazon Appstore etc. Despite availability of so many choices, most of us use either Google play store or Apple Appstore.

Unfair Practices: Both Google and Apple collect payments from App developers to get their Apps listed on their respective Appstore. Apple also requires the App developers to pay 30% as commission for the in-app purchases made by App developers.

Lack of Choice to Consumers and App developers in terms of accessing and listing mobile apps.

Set back to Domestic App Ecosystem: PM Modi has recently highlighted that digital gaming has a huge potential at the international level and called upon Indian entrepreneurs to take a lead and develop apps to boost mobile app ecosystem. But, in the present ecosystem, an entrepreneur faces multiple costs as well as risks as shown below:

- Required to pay charges and commission to get their Apps listed.
- Required to comply with unfair rules and regulations laid down by Big Tech
- In absence of regulation, there is a risk of app being delisted without any mechanism for redressal of his grievances.

So, having an Indigenously developed Appstore would help us address these problems faced by app developers. Further, the regulation of Appstore through an Independent authority would help us lay down clear rules and guidelines over aspects of listing of mobile apps.

WHAT SHOULD BE DONE TO BREAK THE MONOPOLY OF MNCS IN MOBILE APP ECOSYSTEM?

Mobile Seva App Store hosts the various mobile applications for government services as well as private sector mobile apps. This needs to be developed as viable alternative to Appstore of Google and Apple.

Encouraging development of Mini-App Stores: Paytm has recently launched Mini-App store, which is a web-based service that provides access to various apps as if they are downloaded on your mobile. Two advantages here- Saves phone memory and saves Data which otherwise gets used up for downloading the mobile app.

Encouraging development of local handsets: Most of the mobile phones sold in India are Chinese and these come pre-loaded with their own apps and play stores. So, we need to boost the Indigenous manufacturing of Mobile phones. Just like how the Android OS comes pre-loaded with Google applications, we can ensure that mobile phones manufactured in India come pre-loaded with our Appstore such as MobileSeva App store.

SECTION-10

INFRASTRUCTURE AND INVESTMENT

Previous Year Questions

SUB- THEME	YEAR	QUESTION
PPP Model/ Infrastructure	2013	Adaptation of PPP model for infrastructure development of the country has not been free from criticism. Critically discuss the pros and cons of the model.
	2014	Explain how private public partnership agreements, in longer gestation infrastructure projects, can transfer unsuitable liabilities to the future. What arrangements need to be put in place to ensure that successive generations' capacities are not compromised?
	2017	Examine the developments of Airports in India through Joint Ventures under Public-Private Partnership (PPP) model. What are the challenges faced by the authorities in this regard.
Transport	2014	National urban transport policy emphasizes on moving people instead of moving vehicles. Discuss critically the success of various strategies of the government in this regard.
Energy	2018	Access to affordable, reliable, sustainable and modern energy is the sine qua non to achieve Sustainable Development Goals (SDGs). Comment on the progress made in India in this regard.
		With growing energy needs should India keep on expanding its nuclear energy programme? Discuss the facts and fears associated with nuclear energy.
	2020	Describe the benefits of deriving electric energy from sunlight in contrast to the conventional energy generation. What are the initiatives offered by our Government for this purpose?

►NATIONAL MONETISATION PIPELINE- BENEFITS, CHALLENGES AND STRATEGIES NEEDED

The Budget 2021-22 has laid out a three-pronged strategy for infrastructure financing in the country. This includes:

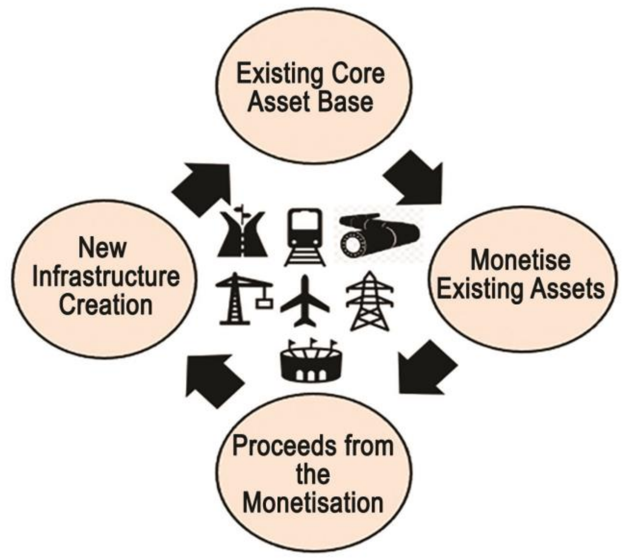
- Creation of institutional structures in the form of Development Bank (National Bank for Financing Infrastructure and Development (NaBFID).
- Increase in allocation of capital expenditure
- National Monetisation Pipeline

The Government has recently launched the National Monetization pipeline (NMP) to raise around Rs 6 lakh crores during the next 4 years -2022-25. This would help us meet our investment needs for the National Infrastructure pipeline. One of the critical factors for ensuring the success of NMP is to attract more investors-both domestic as well as institutional

Concept of National Monetization Pipeline (NMP): Asset Monetisation is defined as **transfer of core assets** owned by the Government to the private sector for a limited period. The **core infrastructure assets** include roads, ports, airports, telecom, railways, warehousing, energy pipelines, power generation, power transmission, hospitality and sports stadiums. NMP does **not include monetization of non-core assets** (such as land, buildings etc).

NMP is not privatisation since the ownership of the assets would continue to remain with the Government. The assets would be only transferred to the private sector for limited duration of time based upon the contract.

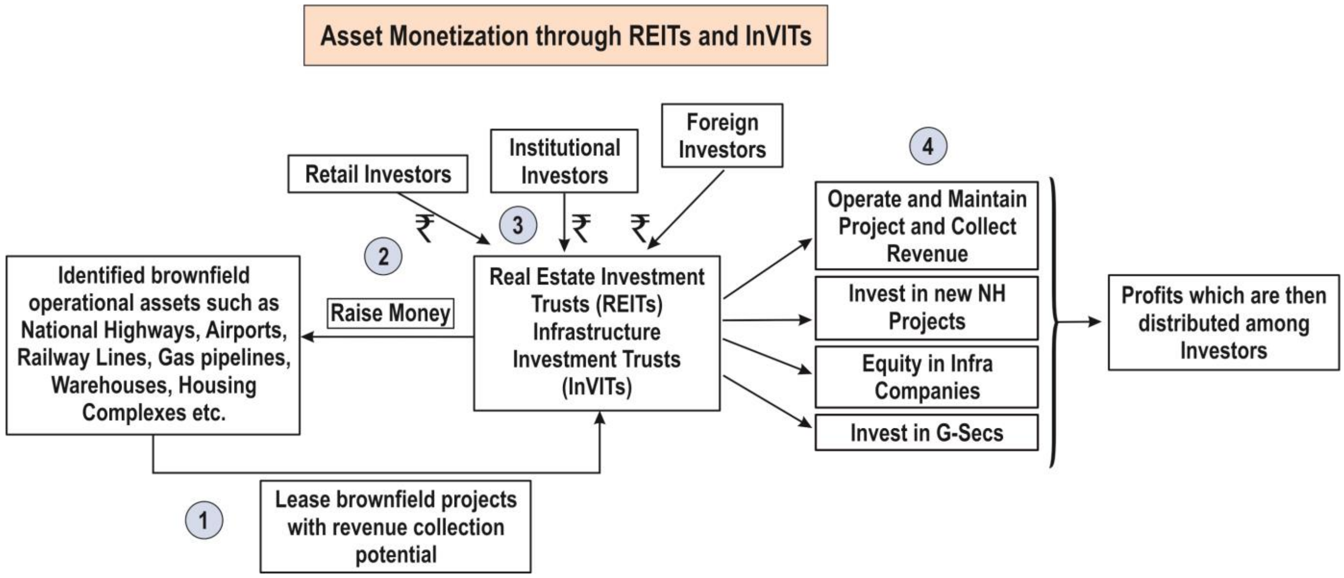
Note: Assets which are central to the business objectives of the Government have been categorised as Core Assets for the purposes of monetisation.



Global Examples: Asset Recycling Initiative (ARI) in Australia helped in raising over $ 17 billion for funding infrastructure. Similarly, Indonesia's Limited Concession Scheme (LCS) was also hugely successful.

Need for National Monetisation Pipeline (NMP): The NMP would help us meet the financing for the National Infrastructure Pipeline (NIP). As estimated by the Task Force for NIP (2019), traditional sources of capital are expected to finance 85% of the capital expenditure under NIP. Remaining 15% is expected to be met through innovative mechanisms such as Asset Monetisation and NaBFID.

Asset Monetization Models	
Direct Contractual Models	**Structured Financing Models**
1. Operate-Maintain-Transfer(OMT) Model: Used as Toll-Operate-Transfer (ToT) Model in National Highways 2. Operate Maintain Develop (OMD): Used as Operation Management Development Agreement (OMDA) in Airports 3. Long term lease Agreements: Used for leasing of Telecom Towers, Bus Terminals, Stadiums etc.	1. Real Estate Investment Trusts (REITs) 2. Infrastructure Investment Trusts (InVITs)



BENEFITS

- **Unlock the value:** The NMP would help us unlock the value of existing public assets such as Roads, Railways, ports etc. It would reduce the burden on the government owned agencies for operation and maintenance of assets.
- **Raise Finances:** The Covid-19 pandemic has led to decrease in revenue collection, while at the same time calls for enhanced public expenditure on capital assets. NMP would enable the Government to raise finances by monetising its existing assets to spend on creation of new infrastructure.
- **Experience with Disinvestment:** In the past, disinvestment proceeds from the PSUs have not necessarily been invested in new infrastructure creation. NMP enables the government to raise revenue without losing ownership of the assets.
- **Risk Averse Private sector:** The Private sector has been reluctant to undertake investment due to economic slowdown. Under NMP, the Government would raise revenue to create new assets and then transfer such assets to the Private sector. This is less risky for the private sector and hence attracts greater investment.
- **Lead role for the Government:** Presently, creation of new infrastructure assets is saddled with multi-faceted challenges such as delays in land acquisition, environmental clearances etc. If the Govt. takes lead in creation of infrastructure, the Government can easily address these challenges.
- **Better Operation and Maintenance of assets:** The Private sector would be involved in operation and maintenance of assets which is expected to improve the service delivery and efficiency in management of public assets.
- **Better Targeted:** Taxpayers' money would not be utilised for the maintenance of the assets. Rather, only those people who use such assets will be required to pay user charges.

CHALLENGES AND CONCERNS

Enhanced Role of the Government: Under NMP, the Government would continue to build and own capital assets. Presently, there are number of problems in creation of infrastructure- time and cost overruns, delays in land acquisition, poor quality of infrastructure etc. This needs to be addressed to ensure success of NMP.

Impact on the people: People may be required to pay higher user charges to private sector.

Lack of Independent regulatory authority in some of the sectors such as Roads, Railways etc. may discourage the private sector investment. An Independent regulatory authority would (a) Make rules and regulations for PPP agreements (b) Ensure that user charges are market determined (c) Adjudicate on disputes between Government and private sector. This would create atmosphere of trust, confidence and fairness and hence encourage private sector investment.

DESIGNING PPP AGREEMENT

- Contracts must provide flexibility for addressing unforeseen developments (such as climate-related disasters, for example).
- Clear quality benchmarks must be set for the assets that are handed over by the government.
- Limit arbitrary actions by the Government such as Cancellation of projects

- Need to set up a robust mechanism for dispute resolution relating to PPP contracts.

Ability to realise fair value: Presently, economy is facing slowdown and the private sector is highly averse to taking risk. Hence, the Government may not be able to realise fair value from the assets due to poor participation of the private entities.

FINANCING PROBLEMS

- Success of NMP depends upon structured financing models such as REITs and InVITs. Poor awareness among the investors may make it difficult for REITs/InVITs to raise money.
- Banks may be unwilling to lend money to the private sector to lease assets.
- Under-developed corporate bond market may make it difficult for the private sector to raise revenues

Encourage Crony Capitalism: Only few large business houses can end up leasing the assets leading to monopolisation.

STRATEGIES NEEDED (NITI AAYOG'S RECOMMENDATIONS)

Streamlining Investment Guidelines: Presently, the SEBI has laid down certain restrictions on the Insurance, Pension fund and mutual fund companies with respect to how much money can be invested in REITs and InVITs. For example, the insurance fund companies cannot invest more than 3% of the money raised by REITs/InVITs. Such lower limits would make it difficult for the REITs/InVITs from tapping long term finances from the institutional investors. Hence, there is a need to enhance the investment limit to mobilize more money from the institutional investors.

Tax benefits: To encourage the participation of the retail investors, the Government should consider providing income tax benefits for the investment in REITs/InVITs.

REITs/InVITs under IBC: The REITs/InVITs can issue bonds to raise money from the market. However, as of now, the REITs/InVITs do not come under the Insolvency and Bankruptcy code. Hence, in case of default by the REIT/InVIT, the lenders cannot take recourse under IBC. Such a restriction may discourage investments in REIT/InVITs. Hence, to encourage investment, there is a need to bring REITs/InVITs under the IBC.

Need for Standard Agreements: There is a need to develop model PPP concession frameworks for various brownfield asset classes for quicker adoption.

Creating institutional structures for fast tracking asset identification and monetisation transaction: Each ministry should establish suitably empowered working group with the sole mandate to identify assets, method of monetisation and handhold in the transactions process.

User Charges by Private sector: Develop mechanism to ensure that the private sector set user charges by considering the investment and risks involved. The user charges should not be too high as it would impact common people.

►INFRASTRUCTURE SECTOR-CONSTRAINTS AND CHALLENGES/ NATIONAL INFRASTRUCTURE PIPELINE

NEED FOR INFRASTRUCTURE BOOST IN THE INDIAN ECONOMY

- **Vision of $ 5 Trillion Economy**: It is estimated that India would need to spend $4.5 trillion on infrastructure by 2030 to sustain its growth rate.
- **Boost Demand and Employment Creation**
- **Increased Urbanisation:** According to World Bank data, by 2030, it is estimated that around 42% of India's population would be urbanised from the current 31%.
- **Changing Demography in India:** The Economic survey 2018-19 has highlighted that the share of working of working-age population would increase from 50% (2011) to 59% (2041), while the share of senior citizens would increase from 8% (2011) to 16% (2041). The changed demography will need the converged development of a host of infrastructure facilities such as housing, water sanitation services, digital and transportation needs.
- **Climate change and disaster resilience**: Building Climate Resilient infrastructure is critical for people's well-being, quality of life, and economic prospects.

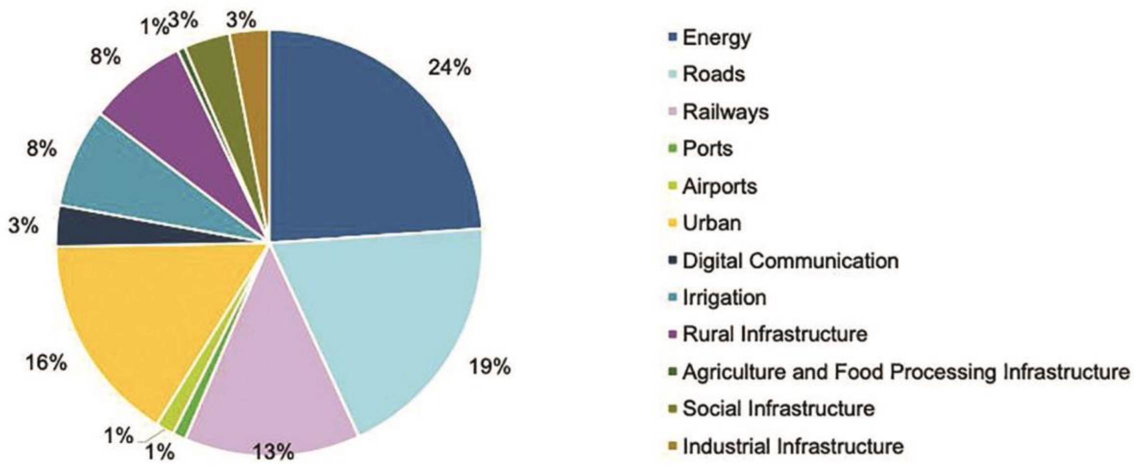
CONSTRAINTS AND CHALLENGES IN TRANSPORT SECTOR

- **The transport network is not planned holistically:** Lack of interconnectedness and synergies in the transport network; Poor Intermodal connectivity; Lack of connectivity between ports and inland modes of transport.
- **Poor Maintenance** of Indian Railways, National highways and roadways etc.
- **Limited Capacity** leading to congestion of roads and railways.

- **Modal imbalances:** Roadways have become the dominant mode of transport of goods at the cost of railways, despite the latter's economic and environmental advantages over the former. Similarly, inland waterways remain underutilized as a mode of transport.
- **Poor Transport safety** leading to increase in accidental deaths
- **Higher dependence on fossil fuels** affecting India's energy security.
- **Lack of access** to long term financing options
- **Delays in** Land acquisition and environmental clearances.

National Infrastructure Pipeline: The Task force has now outlined the expenditure of around **Rs 102 lakh crore over the next 5 years** in order to realise $ 5 trillion economy. The funding of the National Infrastructure Pipeline will be jointly made by the **Centre, states and the private sector** in the proportion of **39:40:22 (39 % by the centre, 40% by the states and 22% by the private sector).**

Sector-wise break-up of project capital expenditure worth Rs 102 lakh crore during FY20-25



Source: Ministries/ departments/state governments

►ROAD SECTOR

PRESENT STATUS

India has the second-largest road network globally. Roads can be classified into national highways, expressways, state highways, major district roads and rural roads. The total road network in India was 59 lakh km. It accounts for largest share in the movement of both passengers and freight.

GOVERNMENT INITIATIVES FOR ROAD SECTOR

Bharatmala Pariyojana: Bridging critical infrastructure gaps through effective interventions like development of Economic Corridors, Inter Corridors and Feeder Routes, National Corridor Efficiency Improvement, Border and International Connectivity roads, Coastal and Port Connectivity roads and Green-field expressways etc.

Setu Bharatam: Make all national highways free of railway crossings

SETTING UP OF MULTI-MODAL LOGISTICS PARKS

Monetisation of Assets through Toll-Operate-Transfer (TOT) Model

Electronic Toll Collection (ETC) system to remove bottlenecks, ensure seamless movement of traffic and collection of user fee.

BhoomiRashi Portal: Digital and paper-less processing of land acquisition related Notifications

Infrastructure Debt Fund (IDF) set up to enhance flow of long-term infrastructure debt

CONSTRAINTS/ CHALLENGES

- Capacity of existing National highways: The NHs account for only 2.2 per cent of the country's total road network but carry 40 per cent of India's total road traffic.
- Maintenance of existing infrastructure: The annual outlay earmarked for maintenance is only about 40 per cent of the funds required
- Low private sector participation in NH - 15%;
- Poor connectivity of remote areas with trunk routes and metros
- Problems with Tolls- Revenue leakages; congestion at toll plazas; Flat rate toll irrespective of actual distance travelled

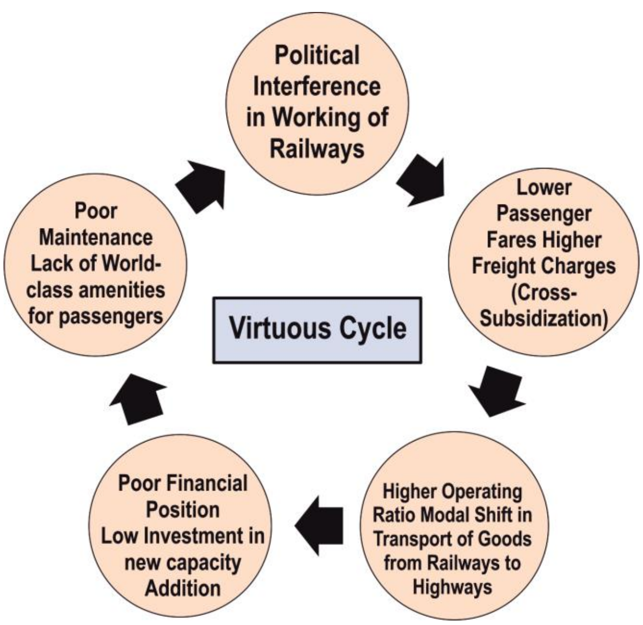
- Cost escalation for roads: Delays in acquiring land can affect project costs
- Limited use of advanced technology in safety and security - traffic management, surveillance, automated fare collection system.

HOW TO ADDRESS THESE CHALLENGES?

- Increase connectivity, especially in Rural India and with Ports by expanding the road network
- Improve road maintenance and safety: Earmark funds from the Central Road and Infrastructure Fund (CRIF)
- Urban Mobility: Dedicated cells for integrated planning, coordination and delivery of transport services in smaller cities; dedicated Metropolitan Urban Transport Authority in larger metropolitan authorities.
- Streamline land acquisition
- Increase emphasis on research and development
- Expand the reach of the electronic toll collection (ETC) system to all the toll plazas.

►RAILWAYS

India has the fourth largest railway network in the world. It has come a long way since 1950-51 in terms of number of trains and quantum of traffic carried. However, it has been highlighted that Indian Railways may end up as burden on the national economy due to the number of issues.



PROBLEMS WITH THE INDIAN RAILWAYS

- **Decline in share of Freight Traffic** on account of shortfall in carrying capacity and lack of price competitiveness. The Indian Railways has kept the passenger fares at lower value while it has increased the freight charges to compensate for this loss. Hence, the cross-subsidization of low passenger fares by artificially high freight rates has led to shift in favor of road transport, for both freight as well as short distance passenger traffic.
- **Under- Investment:** The expenditure on the railways as a percentage of transport expenditure declined from 56 per cent in 1985-90 to 30 per cent in 2007-12.
- **Organizational structure**: Delays in decision making, inadequate market orientation lead to slow turnover times and delays in the implementation of railways projects.
- **Internal generation of resources**: Lower share of the railways in freight traffic; Low and static prices for the passenger segment
- **Safety and poor quality of service delivery**:
- **Higher Operating Cost** of 98.4%

HOW TO ADDRESS THESE PROBLEMS?

The Bibek Debroy committee on Railway Modernisation and Anil Kakodkar Committee on improving railway safety have given a number of recommendations to improve the performance and safety of Indian railways.

Rationalize fare structures and subsidies by ending the cross-subsidisation model presently followed by railways. Freight tariffs should be competitive with the cost of road transportation so that there is increase in the modal share of Railways.

Independent Regulator for Railways to determine the tariff and monitor whether the tariff is market determined and competitive.

Focus on Core Activities of running trains and give up non-core activities such as running schools, hospitals and a police force.

Accounting reforms: The current accounting system does not provide details of the cost of various activities and services, such as introduction of new trains and scheduling of stops. It neither tracks assets nor assesses liabilities. Consequently, it becomes difficult to compute the costs and benefits of any project or activity. Hence, in this regard, there is a need to adopt accounting reforms to track these details.

Financing of Projects: Railways can lease huge amount of land that it holds to the private sector for certain duration of time and earn revenue. Similarly, railways can enter into PPP agreements for the development of stations.

Safety of Railways: The Kakodkar committee had recommended for an investment of Rs 1 lakh crores over a period of 5 years to improve the safety of Indian railways.

►PPP MODEL IN INDIAN RAILWAYS

Last year, the Ministry of Railways invited private sector for the operation of passenger trains in PPP mode on 109 routes across India. Against this background, Government had recently invited tenders from the private sector for the operation of trains along certain identified routes. However, the response of the private sector was poor due to which the Government had to cancel the entire auction process.

NEED FOR PPP IN INDIAN RAILWAYS (IR)

Demand exceeds capacity: Around 5 crore (15%) passengers could not be given confirmed tickets in 2019-20. On certain routes, the demand exceeds the train capacity by 30%

Availability of track capacity: The two Dedicated Freight Corridors (DFCs) are set to be commissioned in 2021. This will generate additional capacity on routes adjacent to the DFCs, where more passenger trains can be run.

Higher Investment needs: PPP enables IR to raise revenue to meet its investment needs of around Rs 50 lakh crores between 2018 and 2030.

Higher Multiplier ratio: IR has strong forward-backward linkages due to which it has large multiplier effect of 5. Investment of Rupee 1 increases the output by Rs 5 (Eco Survey 2014-15)

Benefits to the passenger: Higher service quality and reduced journey times through the introduction of next generation coaches.

How would the PPP model of Private Trains work?

Sharing of Resources: Under this model, the physical infrastructure such as Railway tracks, signaling, Railway stations etc. would remain under the control of Indian railways. The private sector entities would be required to bring in their modern coaches to operate on specific routes. Here, the Private sector entities are expected to be given complete autonomy with respect to fixing the fares and provision of various other services such as catering, housekeeping etc.

Payment Mechanism: The Private sector is required to pay haulage charge to the Railways for the use of its physical infrastructure such as Railway tracks, signaling, Railway stations etc. Apart from that, the private sector operator needs to share the revenue with the Indian Railways.

HOW PPP MODEL IN INDIAN RAILWAYS BENEFITS VARIOUS STAKEHOLDERS?

Benefits for the stakeholders		
Indian Railways	**Private Sector**	**Passengers**
No Political Interference in Fixing of Passenger Fares	Complete independence and autonomy to decide on the fares on such trains.	Greater choice to the passengers
Decrease in operating cost due to higher revenue collections from Private sector	Scope to earn higher Profits	Private sector operators would be forced to attract passengers and hence provide world-class amenities.
Steady income • Haulage Charge • Share of Revenue of Private sector	As of now, only 5% of routes are opened up for private sector. Paves way for higher Private sector participation in Indian Railways	Almost around 5 crore passengers could not be given confirmed tickets in 2019-20. Private sector participation would expand the passenger capacity and hence benefits passengers
Reduce Indian Railways' reliance on borrowed funds for Investment in Expanding Railway Network		

REASONS FOR POOR RESPONSE OF PRIVATE SECTOR

Higher entry barriers: Private entities required to buy their own Fully Air-conditioned modern coaches which are higher costly.

Higher charges: Private entities are required to pay multiple charges to the Indian Railways in the form of Haulage charges, Station usage charges etc. Plus, they are also required to share a certain percentage of their revenue with IR. Private entities argue that the higher charges reduce their profit margin.

Lack of Level playing field: Trains run by Indian Railways (IR) and private sector would operate on same routes. Presently, there is lack of clarity with respect to whether there would be level playing field between IR and Private sector. For example, IR trains may get priority in terms of allotment of platforms, preferential departure, and arrival timings etc.

Unfair competition: Indian Railways maintains lower passenger fares through cross-subsidization. Similarly, the subsidy provided on certain air routes under the UDAN scheme has led to decline in airfare prices.

On the other hand, the Private sector operating the passenger trains needs to fix higher fares to recover its investment. The higher fares on such private trains vis-a-vis IR/air travel acts as major obstacle.

UNREASONABLE TERMS IN PPP AGREEMENT

- Lack of flexibility for the private entities in changing departure/arrival timings, introduction of new halts along the routes, deciding on length of train etc.
- PPP Agreement provides for key performance indicators such as punctuality, reliability, maintenance of trains etc. to be met by private entities. Inability to meet these indicators attracts penalty. For example, if the private trains do not arrive/depart on time, they would be required to pay fine. However, the private entities argue that ability to arrive/depart on time (punctuality) depends on the signaling provided by Indian Railways. So, it would be unfair to force the private entities to pay fines in such cases.

WAY FORWARD

The Bibek Debroy committee on Railway Modernisation had strongly advocated setting up of Railway Regulatory Authority of India (RRAI) to ensure success of PPP in Indian Railways.

Rationale: Presently, policy making, and the regulatory function are both vested with the Ministry of Railways. There is a clear conflict of interest as the regulator (Ministry of Railways) is also the competitor for the private entities. Because of this, private entities would always have an apprehension that policies would be tilted in the favour of Indian Railways. An atmosphere of trust and confidence must be built through setting up of an independent and autonomous regulator in form of RRAI.

ROLE

- Determine whether the tariffs fixed by IR are market determined and competitive. Create level playing field between Indian Railways (IR) and private entities.
- Ensure that the private entities are treated on par with IR on all aspects, including access to railway infrastructure.
- Adjudicate on disputes which may arise between IR and private entities.

Unlike other infrastructure sectors such as Roads, Ports, Airports etc, IR has so far failed to attract private sector investment. Hence, going forward, IR must address various bottlenecks and challenges which are hindering the private sector investment.

►CIVIL AVIATION

India is currently considered the third largest domestic civil aviation market in the world. However, the industry is facing multi-faceted challenges because of which concerns have been raised over the future growth prospects of the Industry.

GOVERNMENT'S POLICY SUPPORT

National Civil Aviation Policy 2016: Aims to take flying to the masses by making it affordable and convenient; covers 22 areas of the Civil Aviation sector.

UDAN ("Ude Desh Ka Aam Naagrik") Scheme: put smaller cities and remote regions on the aviation map

Nabh Nirman Scheme: Expand airport capacity more than five times to handle a billion trips a year.

Challenges before the Aviation Industry

Government Intervention: The flying rights over another country's territory do not lie in the hands of the airline company; rather it depends on the political relation and bilateral treaty between two or more countries.

Rising Fuel Prices: The industry's operational cost component is dominated by the cost of the Aviation Turbine Fuel (ATF) accounting for almost 45% of the operational expenses.

Congestion: Capacity limitations at many airports like Delhi and Mumbai; Inadequate hangar space and unavailability of land to expand airports at their current sites,

High Airport (aeronautical) Charges: The airport charges payable at the International airports are higher than those payable at the airports nominated as Domestic airports or domestic flights leading to higher operational costs of aviation companies.

Shortage and gaps in availability of industry-recognised skills – from airline pilots and crew to maintenance and ground handling personnel.

HOW TO ADDRESS THESE CHALLENGES?

- **Enhance aviation infrastructure**- Complete the planned airports under the UDAN initiative in a time-bound manner; Revival of 50 un-served and under-served airports/airstrips should be completed.
- **Increase investment in the sector through financial and infrastructure support**- Reduce taxes on MRO services and consider granting infrastructure status for MRO; Increase aircraft parking infrastructure and facilities at metro airports.
- Bring **aviation turbine fuel (ATF) under GST.**
- **Address shortage of skilled manpower**- Expedite commencement of courses by the National Aviation University; Facilitate greater involvement of the private sector in sponsoring aviation institutions
- **Ease the regulatory burden**- Deregulate further and open up the aviation market; Strengthen regulatory capacity with respect to public private partnerships etc.

►PORTS & SHIPPING AND INLAND WATERWAYS

India has a coastline spanning about 7,500 km, forming one of the biggest peninsulas in the world. Around 90 per cent of India's external trade by volume and 70 per cent by value are handled by 12major ports and 205 non-major ports operate on India's coast. Yet, roads and railways continue to be the dominant mode for cargo movement. Despite being the most cost-effective and efficient mode, water transport accounted for mere 6 per cent of freight transport in India in 2016-17.

CONSTRAINTS BEFORE INLAND WATER WAYS

- **Modal mix**: Roads (54 per cent) continue to be the dominant mode of transporting cargo, followed by rail (33 per cent). Transportation of cargo through waterways – shipping and inland water – accounts for a minuscule modal share (6 per cent) despite it being the most cost effective and efficient mode.
- **Draught levels**: Most Indian container handling ports lack the capability to handle large container vessels due to inadequate depth; a minimum draft depth of 18 metres is needed to enable mother vessels to dock at ports.
- **Connectivity to ports:** Weak hinterland connectivity between production centres and gateway ports
- **Transhipment port**: A large percentage of containers in India are currently transhipped through other ports, such as Colombo (just south of India), Singapore (East) due to the absence of a transhipment port in the country. This has led to additional costs and delays due to the feeder voyage from India to the hub port.
- **Capital for inland vessels:** At present, the cost of capital is very high and makes IWT freight uncompetitive.
- **Technical issues in inland waterways**: The varying and limited depths due to the meandering and braiding of alluvial rivers and the erosion of their banks causing excessive siltation, lack of cargo earmarked for IWT, non-mechanized navigation lock systems and insufficient unloading facility at terminals hinder the use of IWT by shippers.

WAY FORWARD

- **Open up India's dredging market:** At present, the Dredging Corporation of India (DCI) and a limited set of private vendors serve the Indian dredging market, limiting competition.
- **Expedite the implementation of Sagarmala** to modernise ports.
- **Enhance last mile connectivity to inland waterways:** IWT should be integrated to multimodal/ intermodal connectivity. Inland terminals with proper road and/or rail connectivity and seamless transfer of goods from one mode to the other are important for an efficient logistics supply chain.
- **Facilitate access to capital for inland vessels:** Financing for inland vessels could be made part of priority sector lending by banks. Categorizing inland vessels as infrastructure equipment will further ease

access to capital issues for a sector where capital investments and operational costs are high.

- **Address technical and regulatory constraints** in inland waterways to ease movement of inland vessels- Detention of a vessel without a valid reason should not be allowed; A clear directive needs to be issued for security of inland vessels, crew and cargo; Strengthen existing Inland Water Transport Directorates or Maritime Boards or set them up in states where they do not exist to ease the IWT business and to ensure efficient regulation and facilitation of IWT for cargo movement.
- **Streamline the governance of inland waterways**: Currently, inland waterways are governed by multiple authorities including the Central Inland Water Corporation Limited (CIWTC Ltd), port authorities and state governments. Streamlining the regulatory structure and bringing an overarching body to oversee Inland Water Transport such as the IWAI will bring more consistency in the rules and strategy of the sector.
- **Develop measures for year-round navigation**: Currently, due to weather conditions, several inland waterways are only serviceable during a part of the year. The seasonality of this mode of transport reduces its adoption. Efforts should be made to develop deeper stretches of the river, i.e., at least 2.5 m to 3 m.

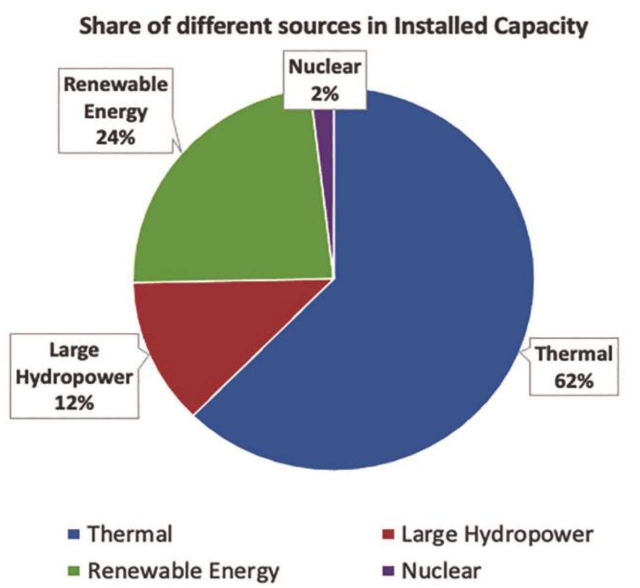
►ENERGY SECTOR

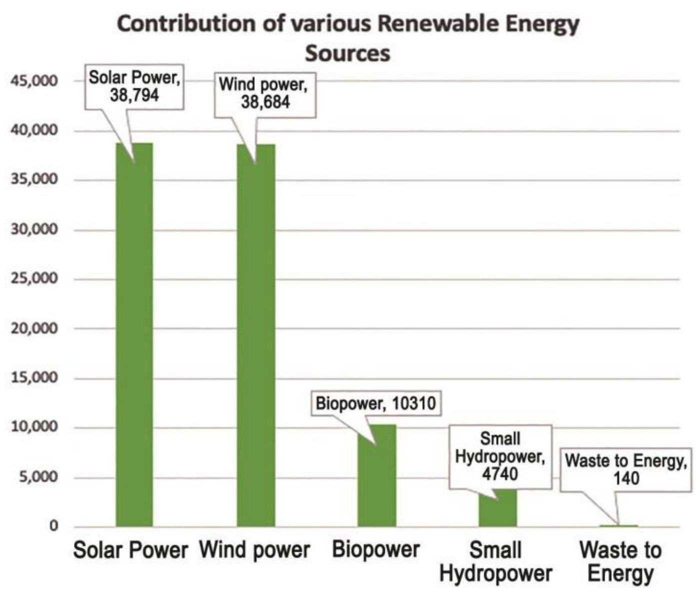
The energy sector is fundamental to growth and development. Availability of electricity, petrol, diesel and gas at competitive prices is essential for the efficient functioning of energy user sectors, which include households, transportation, industry, agriculture and the government and comprise nearly the entire economy.

OBJECTIVES

The government's on-going energy sector policies aim "to provide access to affordable, reliable, sustainable and modern energy".

- Make available 24x7 power to all by 2019.
- Achieve 175 GW of renewable energy generation capacity by 2022.
- Reduce imports of oil and gas by 10 per cent by 2022-23.
- Continue to reduce emission intensity of GDP in a manner that will help India achieve the intended nationally determined contribution (INDC) target of 2030.





►ENERGY POVERTY IN INDIA

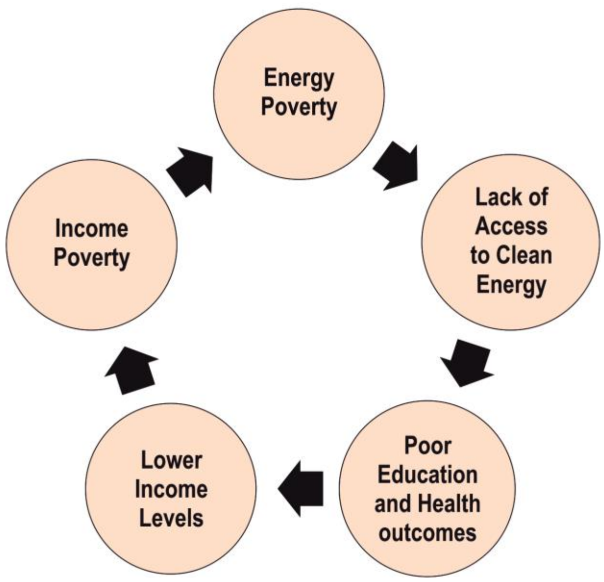
ENERGY POVERTY IN INDIA

According to World Bank, there is direct correlation between Access to Energy and Human Development. Access to clean, affordable and safe energy in the form of electricity, clean cooking fuel etc. automatically leads to improvement in education, health and over-all well-being. That is why, **SDG 7 calls upon the countries to**

provide affordable, sustainable and reliable energy for all.

Even though India accounts for **18% of the world's population**, it uses only around **6% of the world's energy**. India's per-capita energy consumption is one-third of global average. There is also a wide disparity between urban and rural areas in access to energy. Hence, apart from income poverty, India is also facing energy poverty.

Correlation between Access to Energy and Human Development



STEPS TAKEN TO REDUCE ENERGY POVERTY:

Ujjwala Yojana: Deposit-free LPG Connection.

PAHAL Scheme: DBT for LPG Cylinders

Saubhagya Scheme: Electricity connections to all un-electrified households.

KUSUM Scheme: Installation of solar pump-sets.

Energy Efficiency measures such as National Mission on Enhanced Energy Efficiency, Ujala, Standards and Labelling etc.

The Economic Survey 2018-19 has highlighted that India has to increase its per-capita energy consumption by 4 times to achieve higher levels of Human Development. This can be done through:

- Increase subsidy amount under Ujjwala Scheme and use behavioural economics to nudge people to regularly use LPG cylinders.
- Address the issue of frequent power cuts under Saubhagya scheme.
- Promotion of electric induction cookstoves.
- Improve financial health of DISCOMs

There is positive correlation between Access to Energy and Human Development and hence India's prosperity is dependent upon its ability to reduce energy poverty.

►PERFORMANCE ANALYSIS OF PRADHAN MANTRI UJJWALA YOJANA (PMUY)

The Government has achieved its target of providing 8 crore LPG connections to the poor under the PM Ujjwala Yojana. The success of this scheme can be evident in the fact that LPG coverage in India has increased to 95% from 55% in 2014.However, providing connections is just one part of the push towards cleaner and reliable cooking fuels.

About PM Ujjwala Yojana: It aims to provide deposit free LPG connections to poor households. Under the scheme, an adult woman member of a below poverty line family identified through the Socio-Economic Caste Census (SECC) is given a deposit-free LPG connection with financial assistance of Rs 1,600 per connection by the Centre. Eligible households are identified in consultation with state governments and Union territories. The scheme is being implemented by the Ministry of Petroleum and Natural Gas.

PRADHAN MANTRI UJJWALA YOJANA		
Achievements	**Challenges**	**Way Forward**
Target achieved: Target of providing 8 crore LPG connections achieved 7 months ahead of schedule (March 2020). **Increase in LPG coverage** from 62% (2016) to 99.5% (2021). **Addressed energy poverty-** India accounts for 18% of world's population but uses only 6% of world's energy. **Facilitated human development** as	**Higher refilling cost:** On an average, the families with Ujjwala connections are opting for four subsidised cylinders in a year, this is lower than the seven subsidised cylinders that non-Ujjwala connections go for in the same time period. The lower usage can be attributed to higher refilling cost which is forcing them to use the LPG cylinders sparingly.	**Higher subsidy amount to poor households:** Under the National Food Security Act (NFSA), the Antyodaya households are provided higher amount of food grains as compared to priority households. There is a need to adopt this model even in PM Ujjwala Yojana as well wherein the Antyodaya households could be provided the LPG cylinders free of cost.

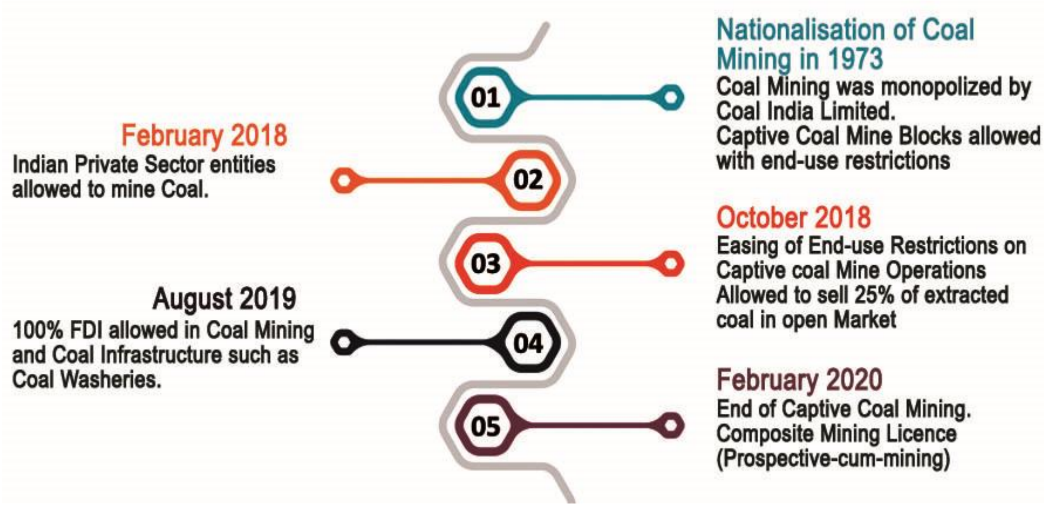
there is direct correlation between access to energy and human development. **Women empowerment** as time saved on collecting firewood can be better spent on more productive activities. **Better health outcomes** as indoor pollution gets reduced **Expansion in constitutional rights** as it strengthens Right to Life (Art 21) **Progress towards SDG 7 -** Access to affordable, reliable and sustainable energy for all	**Flawed mind set of the people:** Most people believe that food cooked on a chulha is healthier and tastier. In contrast, rotis cooked on gas cause indigestion. They also believe cooking with solid fuels is healthy for the women too as the fumes causes tears and purifies the eyes.	**Integrating behavioural economics into Ujjwala Yojana:** Adopt nudge theory to encourage regular and continuous usage of the LPG cylinders. The Government must launch a campaign communicating that solid fuels harm respiratory health. Similarly, advertisements that food cooked on gas can be as tasty and healthy as food cooked on a chulha would be helpful.

►COAL SECTOR REFORMS

PRESENT STATUS OF COAL SECTOR

- India has the world's third largest coal reserves. India is also the second largest coal producer in the world. However, due to the growing needs of the rapidly expanding economy, the annual demand for coal has increased to around 900 MT. Hence, the shortage of coal in India is met through imports.
- Coal accounts for almost 55% of our energy needs. Hence, the shortage of coal within our domestic economy is forcing the thermal power plants to operate their threshold capacity. This has led to lower profit margins of the thermal power plants and reduced their ability to repay back the loans to the banks. Thus, the shortage of coal within India has not only led to poor financial position of power plants but it has also led to increase in the Non-performing assets (NPAs) of the Indian banks.

GOVERNMENT'S INITIATIVES TO LIBERALISE COAL SECTOR



SIGNIFICANCE OF GOVERNMENT'S INITIATIVES

Boost Coal Mining: Domestic production by Coal India Ltd (CIL) has been unable to keep up with the demand for coal

Meet the Coal Needs of Power Plants: Power plants in India have been operating below their installed capacity, necessitating imports to meet demand.

Reduce Current Account Deficit: 25% of our coal requirements are met through imports

Technological advancement in Coal Mining: FDI would lead to newer and efficient exploration technologies and methods for mining coal, especially high-end technology for underground mining used by global miners, which would help in lowering costs.

Promote Competition: New policy would also enable the opening up of the industry to competition, which until now had been the monopoly of Coal India Limited.

►MAJOR CONSTRAINTS IN THE ENERGY SECTOR

SUBSIDIES AND TAXES: A variety of subsidies and taxes distort the energy market and promote the use of inefficient over efficient fuels. They also make Indian exports and domestic production uncompetitive as energy taxes are not under GST and hence, no input credit is given.

COAL

- Monopoly in extraction of coal by Coal India Limited;
- Demand-supply mismatch in coal leading to imports (25% of domestic requirements);
- Most of the thermal power plants are operating below their capacity- Plant Load Factor (PLF) is hardly around 56% in 2019-20;
- Delays in Land acquisition;
- Tendency to expand opencast mining and discourage underground operation even for better quality coal reserves;
- outdated technology;

POWER GENERATION, TRANSMISSION AND DISTRIBUTION

- Old inefficient plants continue to operate whereas more efficient plants are underutilized.
- Although legally independent, Regulatory Commissions are unable to fully regulate discoms and fix rational tariffs.
- State power utilities are not able to invest in system improvements due to their poor financial health.
- High aggregate technical and commercial (AT&C) losses
- Unmetered power supply to agriculture provides no incentive to farmers to use electricity efficiently
- High industrial/commercial tariff and the cross-subsidy regime have affected the competitiveness of the industrial and commercial sectors.

ENERGY EFFICIENCY

- Limited technical capabilities, high initial capital expenditure, limited market and policy issues have adversely affected efforts to achieve energy efficiency.
- Non-availability of sufficient credit facilities and difficulties in obtaining required finances for energy saving projects are strong deterrents to investments in energy efficiency in India

RENEWABLE ENERGY: High energy costs result in reneging on old power purchase agreements (PPAs) and erode their sanctity. This leads to uncertainty regarding power off take and consequently endangers further investments.

►PERFORMANCE ANALYSIS OF UDAY SCHEME

BACKGROUND

The State DISCOMs have been suffering from poor financial viability due to number of reasons. These discoms have been supplying electricity at tariffs that are far below their operating cost mainly due to political intervention. Inefficiencies in power distribution such as large transmission and distribution losses on power have further strained the finances of the discoms. These DISCOMs have borrowed heavily from banks to meet their operational expenses. Due to their poor financial viability, the loss making DISCOMs have failed to fulfill their debt obligations leading to increase in the NPAs of the Banks.

OBJECTIVE OF UDAY SCHEME: The Scheme envisages financial turnaround of the DISCOMs so as to improve their financial viability through operational improvement. The idea is to reduce the debt burden of the DISCOMs wherein the states would take over some percentage of their Debt obligations of the DISCOMs. In return, the DISCOMs are required to implement structural reforms in order to improve their financial viability.

SALIENT FEATURES OF THE SCHEME: States should take over 75% of the DISCOM debt - 50% in 2015-16 and 25% in 2016-17. The governments will then issue 'UDAY bonds' to banks and other financial institutions to raise money to pay off the banks. In return for the bailout, the discoms have been given target dates (2017 to 2019) by which they will have to meet efficiency parameters such as reduction in power lost through transmission, theft and faulty metering, installing smart meters etc.

PROBLEMS WITH THE SCHEME

- As per the MoU signed under the UDAY Scheme, the discoms were required to initiate structural reforms by reducing Aggregate Technical and Commercial Losses (AT&C) from 26% in 2015 to 15% in 2019. They were also required to implement regular tariff hikes of 5-6% per annum. However, the DISCOMs have failed to initiate structural reforms due to which they are unable to meet the targets set under the UDAY Scheme.
- Other problems of the DISCOMs are as highlighted below:
    - Lack of Metering of electricity connections.

- Increase in the power theft cases.
- Loss due to electricity subsidies to agriculture.
- Fall in the cost of renewable energy generation has put pressure on DISCOMs, which traditionally depend upon sourcing major part of their power requirements from coal-fired thermal power stations.

►PROGRESS REPORT OF RENEWABLE ENERGY - CONSTRAINTS AND CHALLENGES

Progress Report of Renewable Energy	
Targets	**Achievements as on 31st July 2021**
175 GW of Renewable Energy by 2022 450 GW by end of 2030 Solar -100 GW Wind- 60 GW Biomass-10 GW Small Hydropower (less than 25 MW) - 5 GW	100 GW of Renewable Energy 4th in terms of Installed Renewable capacity 5th in Solar and 4th in Wind
40% of Installed Capacity from non-fossil fuels by end of 2030	25% from Renewable Energy Sources (Solar, Wind, Biomass, Small Hydropower) + 12% from Large hydropower (More than 25 MW) Total 37% of Installed capacity from Non-Fossil Fuels

SLOWDOWN IN THE RENEWABLE ENERGY GENERATION:

The Government of India has set a target to set up 175 GW of Renewable energy by 2022. However, wind and solar power capacity additions have been far less than satisfactory and hardly on the path to meeting the targets. The Reasons for slowdown in Renewable Energy Addition can be seen as given below:

- Sub-categories of renewable energy such as rooftop solar, solar heating etc. have not received adequate focus.
- Unviable projects due to lower tariffs
- Weak financial position of DISCOMs
- Increased competition is making renewable energy less financially rewarding
- Withdrawal of incentives such as Viability Gap Funding
- Lack of domestic manufacturing of solar PVs and wind turbines.
- Increased custom duties on solar panels
- Poor transmission infrastructure
- States not honoring PPAs and Renewable Energy Contracts

Renewable Energy sources are an excellent way to fulfil our developmental needs by balancing the requirements to deal with climate change. Hence, new policies such as **Ultra Mega Renewable Energy Power Parks (UMREPP), One world one sun one grid, International Solar Alliance, Hybrid solar-wind policy** need to be effectively implemented.

►DIGITAL INFRASTRUCTURE- PROSPECTS, CONSTRAINTS AND WAY FORWARD

Digital connectivity facilitates the communication and commerce that drives economic growth. Individuals cannot transfer payments digitally, use e-governance portals to connect with the government, access information or make online purchases without continuous and reliable Internet or telephone access. The Digital India Programme has made significant progress in its nine growth areas. The areas of focus include building broadband highways, providing universal access to mobile connectivity, a public internet access program, e-governance, electronic service delivery, access to information, increasing

electronics manufacturing, providing information technology skills for jobs and early harvest programs.

Current Situation: According to the Internet Trends 2017 report, 27 per cent of India's population (355 million users) uses the internet. While this represents exponential growth compared to the 4 per cent penetration in 2009, there is scope for improvement. Tele-density, or the number of telephone connections for every 100 individuals, is 83. In rural areas, the tele-density is one-third that of urban areas.

GOVERNMENT INITIATIVES

National Digital Communication Policy

- Broadband for all
- Creating 4 million additional jobs in Digital Communications sector
- Enhancing contribution of the digital communication sector to 8% of India's GDP from 6% in 2017.
- Propelling India to Top 50 Nations in the ICT Development Index of ITU from 134 in 2017.
- Enhancing India's contribution to Global Value Chains
- Ensuring Digital Sovereignty

National Broadband Mission: Universal and equitable access to broadband services across the country, especially in rural and remote areas.

Digital India Scheme: Areas of focus include broadband highways, providing universal access to mobile connectivity, a public internet access program, e-governance, electronic service delivery, access to information, increasing electronics manufacturing, providing information technology skills for jobs and early harvest programs.

BharatNet: Providing high-speed broadband to all the panchayats in the country

National Information Infrastructure (NII): Ensure the integration of the networks and cloud infrastructure to provide high-speed connectivity to various government departments up to the panchayat level.

Public Internet Access Programme: Make 2,50,000 common service centres (CSCs) operational at the gram panchayat level to deliver government services online

Universal Service Obligation Fund (USOF): Fund is raised through the imposition of 'Universal Access Levy (UAL)', which is a percentage of the revenue earned by the operators under various licenses. This fund was established with the object of improving telecom services in the remote and rural areas of India.

CONSTRAINTS AND CHALLENGES

1. **Broadband connectivity**

- Internet access is plagued by issues related to quality and reliability, outages, call drops and weak signals.
- The current definition of broadband of 512 kbps speed is inadequate and not in line with the expected rise in demand in the future.
- Existing networks have been strained by limited spectrum availability and usage, affecting the provision of quality services.

2. **Digital access and literacy**

- A significant portion of our population does not have access to devices such as laptops, computers, smartphones, etc.
- Digital literacy in India is estimated to be less than 10 per cent of the population.

3. **Content in Indian languages**: Currently, most digital content is in English. However, "9 out of every 10 new internet users in India over the next 5 years are likely to be Indian language users".

4. **Availability of e-services:**

- A large number of e-services are not available on the digital platform
- Wide variation across states in the availability of citizen e-services.
- Currently, citizens have to physically visit government offices to access most government-to-citizen (G2C) services, as municipalities and other government bodies have been slow to digitize their processes.

5. **Cyber security**: The regulatory framework for cyber security is inadequate. Hacking and denial-of-service attacks have led to disruption of services, both in the government and the private sector – banks and governments increasingly face security breaches.

STRATEGIES NEEDED TO IMPROVE DIGITAL INFRASTRUCTURE

Improving Access:

- Provide Universal broadband connectivity at 50Mbps to every citizen
- Provide 1 Gbps connectivity to all Gram Panchayats of India by 2020 and 10 Gbps by 2022
- Enable deployment of public Wi-Fi Hotspots; to reach 5 million by 2020 and 10 million by 2022
- Ensure connectivity to all uncovered areas

Innovation in Digital Sector

- Attracting investments of $100 billion in the Digital Communications Sector
- Creation of Innovation led Start-ups in Digital Communications Sector

- Accelerateate transition to Industry 4.0

Quality of Service: Adequate availability of spectrum is critical to ensure service quality. Efficient spectrum allocation in large continuous blocks should be explored. We should explore migration to new technologies which would resolve some of the bandwidth challenges.

Access and digital literacy: The National Digital Literacy Mission should focus on introducing digital literacy at the primary school level in all government schools for basic content and in higher classes and colleges for advanced content. Multiplier effects of this mission will be realised when these students in turn educate their family members.

CONTENT IN INDIAN LANGUAGES

- State governments should pay special attention to creating content, particularly those relating to government e-services, in Indian regional languages.
- Centre, States and researchers need focused collaboration to promote Natural Language Processing for making all government's online services available in all 22 official languages.
- Focus could be laid on the automatic translation of content into regional languages from Hindi or English.
- Case studies like those of the European Union, which had similar problems in making content available in the languages of member countries, should be explored to identify models that can potentially be adopted.

Availability of e-services: Individual ministries and states have to play a pivotal role in ensuring that all their services are available and easily accessible by citizens over digital platforms. Boosting domestic manufacturing of Electronics and other Digital Components.

Boost Electronics Manufacturing to reduce the import of electronic Goods and ensure digital sovereignty

CYBER SECURITY

- Need to evolve a comprehensive cyber security framework for data security, safe digital transactions and complaint redressal.
- Promotion of Data Localisation and a comprehensive data protection regime based on recommendations of B N Srikrishna Committee should be implemented.
- Principles of Net neutrality should be upheld and aligned with service requirements.
- Security standards and testing for devices and networks should be mandated and periodically updated.

WAY FORWARD

Digital Infrastructure is the bedrock on which the vision of digitally empowered Digital India can be realised. This needs to be given focussed attention for a transparent, empowered and secure India of 21st Century.

►LOGISTICS SECTOR- CONSTRAINTS AND CHALLENGES

CURRENT SITUATION

Logistics is the overall process of managing how resources are acquired, stored and transported. It includes industrial parks, warehouses, cold storages and transportation.

- Employs around 22 million people (2016).
- Growth rate in the last decade is around 7.8%
- Higher Logistics costs in India around 14 % of GDP (U.S - 9 %, Japan- 12 %)
- Poor Ranking on Logistic performance Index
- A 10 per cent decrease in indirect logistics cost has the potential to increase exports by 5-8 per cent.

CONSTRAINTS IN LOGISTIC SECTOR

- **Cost of logistics:** The cost of logistics remains high due to challenges in accessing finance, underdeveloped infrastructure, poor connectivity and an unfavourable modal mix. (India: Road-60%, Rail-31%, Water-9%; International Benchmarks: Road-25-30%, Railways-50-55%, Waterways- 20-25%)
- **Coordination due to multiple stakeholders' involvement**: Logistics has four key components: transport, warehousing, freight forwarding and value-added logistics. Each of these falls under different segments of regulatory oversight, which adds complexity to the system. The presence of multiple agencies often leads to duplicate processes. Non-uniform documentation across states adds to transaction costs.
- **Warehousing capacity and fragmented structure**: India's current reported warehousing capacity is 108.75 million metric tonnes (MMT) of which the private sector makes up less than 20 per cent. There is low value addition in the warehouse sector. Handling and warehousing facilities are still largely un-mechanized with manual loading, unloading and handling in the case of many commodities.
- **Seamless movement of goods across modes and high dwell time**: The movement of goods across modes suffers from the absence of last mile connectivity and infrastructure.

- **Interoperable technology across modes:** The lack of interoperability of software systems used by the authorities governing different modes of transport leads to inefficiencies as it increases transit time and the need for manual intervention when switching modes.
- **Higher Border compliance and document processing time**

MEASURES TAKEN BY GOVERNMENT

- Draft National Logistics Policy – for higher economic growth.
- Infrastructure status to Logistics.
- Infrastructure lending at easier terms with enhanced limits.
- Access to larger amounts of funds as External Commercial Borrowings (ECB).
- Access to longer tenor funds from insurance companies and pension funds.
- Eligibility to borrow from India Infrastructure Financing Company Limited (IIFCL).
- National Trade Facilitation Action Plan - reflection of the Government's commitment to implement the Trade Facilitation Agreement (TFA)
- New Logistics Division in the Ministry of Commerce and Industry (Bibek Debroy committee recommendation)
- E-way bill – reduced truck turnaround time by 20%.
- India has signed International Conventions:
  - **UN TIR convention**(*Customs Convention on International Transport of Goods)*
  - **TFA of WTO has been ratified -** which aims to simplify custom procedure.
- LEADS Index – by Ministry of Commerce & Industry
- Infrastructure creation – Bharatmala, Sagarmala, BBIN (*framework MVA)*
- logistics park - Ministry of Road Transport and Highways (MoRTH) is developing multi-modal logistics parks at selected locations in the country under its **Logistics Efficiency Enhancement Program** (LEEP)
- Relaxed FDI norms.
- GST has eased cross border movement of goods.

WAY FORWARD

- Driving logistics cost as a % of GDP down from estimated current levels of 13-14% to 10% in line with best-in-class global standards and incentivize the sector to become more efficient by promoting integrated development of logistics
- Optimizing the current modal mix (road-60%, rail-31%,water-9%) in line with international benchmarks(25-30% share of road, 50-55% share of railways, 20-25% share of waterways)
- Enhancing efficiency across the logistics value chain through increased digitization and technology adoption such as Blockchain, Bigdata, and AI etc.
- Ensuring standardization in logistics (warehousing, packaging, 3PL players, freight forwarders)
- Creating a National Logistics e-marketplace as a one stop marketplace. It will involve simplification of documentation for exports/imports and drive transparency through digitization of processes involving Customs, PGAs etc. in regulatory, certification and compliance services
- Improve India's ranking in the Logistics Performance Index to between 25 to 30
- Strengthening the warehousing sector in India by improving the quality of storage infrastructure including specialized warehouses across the country
- Set up Multi Modal Logistics Park Authority (MMLPA)

►ELECTRIC MOBILITY- IS INDIA READY FOR ELECTRIC VEHICLES?

NEED TO PUSH FOR ELECTRIC MOBILITY

Climatic change: India has committed to cutting its GHG emissions intensity by 33% to 35% below 2005 levels by 2030

Advances in renewable energy and battery technology: Lower cost of clean, low-carbon energy with higher energy densities, faster charging and long-lasting batteries.

Rapid urbanization: According to a recent study by WHO, India is home to 14 out of 20 most polluted cities in the world. Electric vehicles (EVs) can improve that scenario by reducing local concentrations of pollutants in cities.

Data capture and analysis - Mobility has undergone a digital revolution. This has created possibility of a greater utilization of existing transportation assets to move towards electric mobility.

Opportunities through Improved battery technology: Advances in battery technology have led to higher energy densities, faster charging and reduced battery degradation from charging.

Energy security: EV's will facilitate lower reliance on fossil fuel imports and at the same time reduce India's Current account Deficit (CAD).

Lower Maintenance of Electric Vehicles due to less number of moving parts.

NITI Aayog in its recent report has highlighted that making India's passenger mobility shared, electric and connected can cut its energy demand by 64% and carbon emissions by 37%. This roughly translates into savings of Rs 3.9 lakh crores by 2030.

INITIATIVES TAKEN FOR ELECTRIC MOBILITY

National Electric Mobility Mission Plan 2020: Aims to have 6-7 Million Electric Vehicles by the end of 2020. Implemented by Ministry of Heavy Industries and Public Enterprises.

National Council for Electric Mobility: Inter-Ministerial team headed by Minister of Heavy Industries to approve Electric Mobility Plans.

National Board for Electric Mobility: Inter-Secretarial team headed by Secretary, Department of Heavy Industries to recommend Policies for adoption of Electric Vehicles.

FAME Scheme (Phase II): Demand Incentive and Charging Infrastructure

CHALLENGES IN THE ADOPTION OF ELECTRIC VEHICLES

In spite of these initiatives, the share of Electric vehicles in India has remained below 1%. This is quite low as compared to countries such as Norway where the share of electric vehicles is as high as 40%. Similarly, last year, China alone accounted for more than half of the global sale of Electric Vehicles. Some of the constraints and Challenges are:

- **Higher Dependence on Raw Materials:** India does not have enough reserves of rare earth minerals such as Lithium, Cobalt etc. which are required for manufacturing batteries. Most of these minerals are imported from countries such as China.
- **Poor Charging Infrastructure**: Once fully charged, the Electric Vehicles can run for an average maximum distance of around 250 km. Hence, unless the charging infrastructure improves, the demand for electric vehicles would remain lower.
- **Higher Capital costs** of Electric vehicles in comparison to conventional vehicles.
- **Lower efficiency of Electric vehicles** in terms of average speed and distance travelled.
- **Energy Insecurity**: The Fossil fuels account for almost 65% of electricity needs in India. Hence, the higher demand for electricity to charge electric vehicles could lead to increased demand for fossil fuels.
- **Lack of skilled manpower** for the manufacture of Electric and hybrid vehicles.

WHAT SHOULD BE DONE TO PROMOTE ADOPTION OF ELECTRIC VEHICLES?

- **Revisiting FAME Scheme:** Provide higher incentive for two-wheelers instead of four wheelers.
- **Promote Battery Swapping**
- **Retrofitting Existing Vehicle Fleet** by enabling them to act as Hybrid Vehicles (both Petrol/Diesel and Electric).
- **Ensuring availability of critical and strategic minerals** such as Lithium, Cobalt etc. by acquiring mines overseas. The setting up of Khanij Bidesh India Ltd. (KABIL) to ensure mineral security is a step in right direction.
- **Providing charging infrastructure:**
- **Import Duty and Make in India**: Components such as batteries, drivetrains etc. should have lower customs duty as compared to finished Electric cars.
- **GST rates:** The GST rates should favour commercial vehicles in comparison to private vehicles.
- **Invest in Research and Development** in new approaches and technologies such as hydrogen fuel-cells, new battery-chemistries (with higher specific energy and energy densities) etc. Appropriate guidelines have to be laid down for provide for tax exemption and utilisation of CSR Funds.
- **Added thrust on Renewable energy projects** such as Solar, Wind etc. for charging of Electric Vehicles and to ensure energy security.
- **Explore innovative incentives** to promote Electric Vehicles such as Doing away with Road Tax and Registration charges, free toll, free parking, dedicated parking spaces in offices and residential buildings etc.

►STRATEGIC AND CRITICAL MINERALS: PROSPECTS, CHALLENGES AND STRATEGIES IN ENSURING MINERAL SECURITY

IMPORTANCE OF STRATEGIC AND CRITICAL MINERALS FOR INDIA

Strategic minerals such as ***Beryllium, Rhenium, Rare Earths, Germanium, Lithium, Cobalt, Tantalum, Chromium, Strontium etc***. find specialized use in a range of industries and modern applications, such as Electric Vehicles, aerospace, defence, laptops, medical imaging, nuclear energy and smartphones.

According to a report published by Council on Energy, Environment and Water (CEEW), 12 critical minerals could play an important role in the success of 'Make in India' programme.

Present Status of Critical Minerals in India: India is totally import-dependent for seven out of 12 identified minerals and does not have any declared resources for them, except light rare earth (found along with monazite sands) and beryllium. Presently, India is heavily dependent upon the imports of these minerals from countries such as China. China is currently a leading global supplier for 6 out of the 12 mineral resources identified as critical for India by 2030.

CHALLENGES IN ENSURING MINERAL SECURITY FOR INDIA

Low Resource Base in India: Almost 100% dependency for rhenium, germanium, strontium, and rare earth. Moreover, the concentrations of some strategic minerals such as gallium, germanium, indium, selenium, tellurium, etc., in ore deposits are too low.

Unequal Distribution of Resources: More than 50% of World's production is contributed by only 4-5 countries such as China, Democratic Republic of the Congo, Bolivia, Argentina, Chile etc.

Increased Demand for Strategic Minerals: Strategic minerals are crucial in the production of a range of high-tech and clean energy technologies. For example, India's push for Electric Mobility is critically dependent upon availability of Lithium and Cobalt.

Geopolitical/ Geo-Economic Constraints: The concentration of Strategic minerals in specific countries such as China could lead to supply side disruption. For example, 97% of the rare earth supplies are controlled by China globally. In the recent past, it has decided to put export restrictions on rare earth minerals.

Enhanced Competition over Strategic Minerals could lead to exponential increase in their prices.

STRATEGIES TO ENSURE MINERAL SECURITY IN INDIA

- ***Focus on Advanced Exploration and mining methods*** to explore and mine strategic minerals. For example, advanced beneficiation techniques of removing impurities can enable India to extract strategic minerals from low-grade ores.
- ***Focus on recycling of waste and scrap*** to extract strategic minerals, which then can be reused.
- ***Focus on R&D to develop new material***s which can substitute strategic minerals.
- ***Obtain a secure supply of strategic minerals*** from the friendly nations
- ***KABIL must enter into Bilateral agreements*** with other countries to acquire overseas mines

►NATIONAL MINERALS POLICY 2019

The aim of National Mineral Policy 2019 is to have a more effective, meaningful and implementable policy that brings in further transparency, better regulation and enforcement, balanced social and economic growth as well as sustainable mining practices.

SALIENT FEATURES

- Encouraging the private sector to take up exploration.
- Auctioning in virgin areas for composite RP cum PL cum ML on revenue share basis.

  (RP means Reconnaissance Permit, PL means Prospecting License, ML means Mining Lease. RP is granted for preliminary prospecting of a mineral through regional, aerial, geophysical or geochemical surveys and geological mapping. PL is granted for undertaking operations for purpose of exploring, locating or proving mineral deposit. ML is granted for undertaking operations for mining minerals.)
- Encouragement of merger and acquisition of mining entities
- Transfer of mining leases and creation of dedicated mineral corridors to boost private sector mining areas.
- Introduction of Right of First Refusal for RP/PL holders. (*Usually, the mines are leased for a specified period of* time *and upon the expiry of the lease period, the mine is auctioned once again. Under the Right to First Refusal Option, when the mine is auctioned through bidding, the company presently involved in the exploration of the mine would be given the option of keeping the mining lease by paying the bidding amount. However, if it refuses to pay the bidding amount, only then the mining lease gets transferred to a third party.)*
- Grant status of industry to mining activity to boost financing of mining for private sector (Getting 'industry' status will help in easy sanction of loans for projects.)
- Use coastal waterways and inland shipping for evacuation and transportation of minerals and encourages dedicated mineral corridors to facilitate the transportation of minerals.
- Concept of Inter-Generational Equity that deals with the well-being not only of the present generation but also of the generations to come.

- Constitute an inter-ministerial body to institutionalize the mechanism for ensuring sustainable development in mining.

BENEFITS

New National Mineral Policy will ensure more effective regulation. It will lead to sustainable mining sector development in future while addressing the issues of project affected persons especially those residing in tribal areas.

►PPP - NEED, MODELS, CONSTRAINTS AND WAY FORWARD

WHAT IS PUBLIC PRIVATE PARTNERSHIP?: PPP refers to a contractual arrangement between a government or a government-owned entity on one side and a private sector entity on the other wherein the private sector entity provides for public assets or public services.

NEED FOR PPP IN INDIA

- **Vision of $ 5 Trillion Economy**: It is estimated that India would need to spend $4.5 trillion on infrastructure by 2030 to sustain its growth rate.
- Boost Demand and Employment Creation
- **Equitable risk allocation and mitigation**
- **Plugging the deficiency in infrastructure to cater to Increased Urbanisation**
- **Complementary roles and drivers**: The public sector is predominantly driven by the 'public good', while the private sector by 'profit'. PPP projects allow both the sectors to cooperate and enable both of them to meet their goals.

INITIATIVES TAKEN BY GOVERNMENT TO BOOST PPP

- **Viability Gap Funding (VGF) Scheme:** The scheme aims at supporting infrastructure projects that are economically justified but may not be financially viable
- **India Infrastructure Project Development Fund (IIPDF):** funding to Central, State and local bodies to carry out various activities related to project development.
- **Public Private Partnership Appraisal Committee:** to streamline the procedure for approval of PPP projects
- **India Infrastructure Finance Company (IIFC):** Dedicated institution for financing infrastructure with focus on PPP projects.
- **National Infrastructure Investment Fund (NIIF):** Quasi-Sovereign Wealth Fund to provide financing to infrastructure projects.
- **Rupee denominated bonds or masala bonds** were launched to eliminate foreign exchange risk.
- RBI introduced **NBFCs (Infrastructure Finance Companies (IFCs))** to provide credit facilities to projects.
- **Setting up of Infrastructure Investment Trusts (InvITs)**

MODELS OF PPP IN INDIA

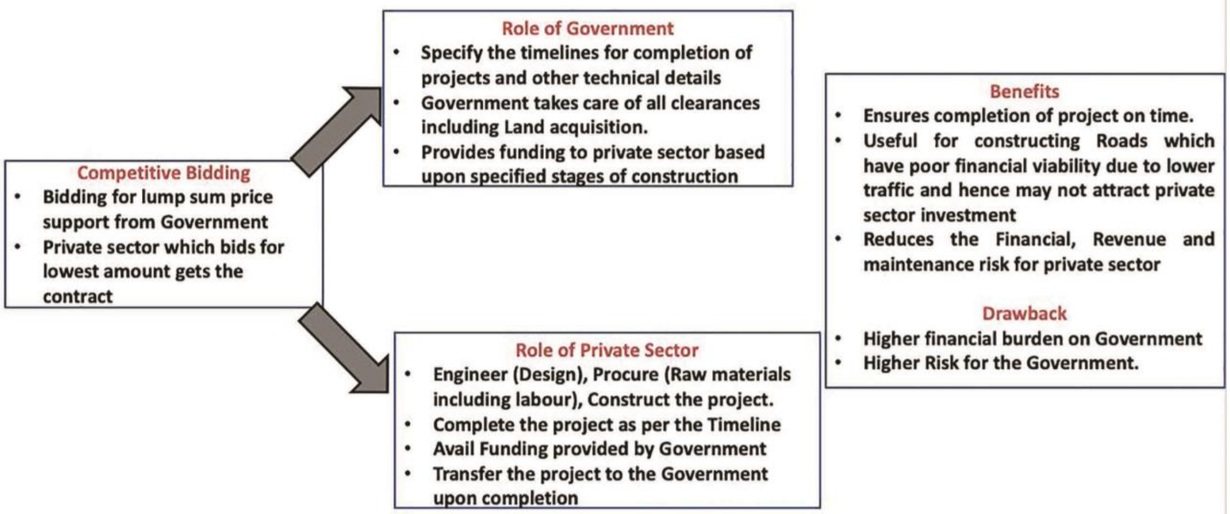
PPP arrangements are characterised by the identification of risks and their allocation among the parties to the arrangement. On the basis of the risk allocation, the various PPP models are designed.

Type of Risk ⇒ Type of Model ⇓	Financing Risk	Revenue Risk	Maintenance Risk
BOT Model	Private	Private	Private
EPC Model	Govt.	Govt	Govt
HAM Model	Govt, and Private	Govt.	Private

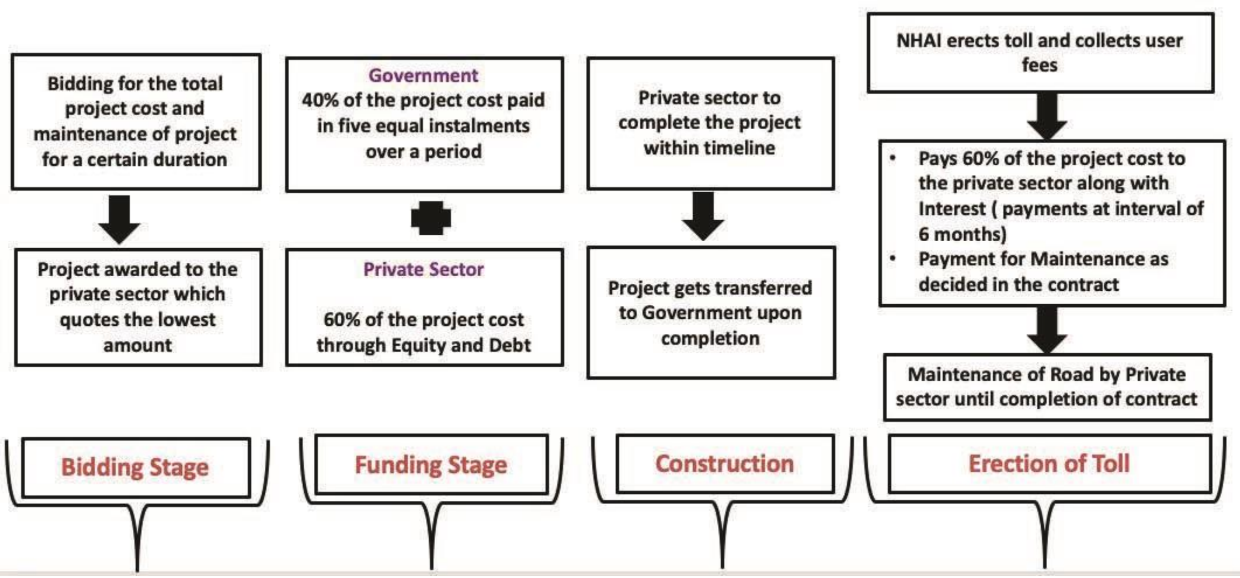
Build-own-operate Transfer (BOOT) Contracts	Private partner has the responsibility for construction and operations. Ownership is with the private partner for the duration of the concession.				
MODES	**Asset ownership during contract**	**PPP duration**	**Capital Investment by**	**Rote of Private Sector**	**Examples**
Build-own-operate-transfer (BOOT) or DBOOT	Private	Long (e.g. 20-30 yrs.)	Private	Design, Finance, construct, own, manage, maintain. Transfer	Used for development of Minor Ports
Build-own-operate (BOO)	Private	Perpetual	Private	Design, Finance, construct, own, manage, maintain	Not very common in India

Build-Ope rate-Transfer (BOT) Contracts	**Responsibility for construction and operations with the private partner while ownership is retained by the public sector.**				
MODES	**Asset ownership during contract**	**PPP duration**	**Capital Investment by**	**Role of Private Sector**	**Examples**
Design-build-operate (DBO)	Public	Short-medium (e.g. 3-5 yrs)	Government	Design, construct, manage, maintain	Not very common in India
Build-operate-transfer (BOT)/ Design-Build-Finance-Operate-Transfer (DBFOT)	Public	Long (e.g. 20-30 Yrs)	Private	Design, finance, construct, manage, maintain, Transfer	Most common form. Used for Bus terminals. Highways, Expressways, Water supply etc.

EPC Model



Hybrid Annuity Model



CHALLENGES RELATED TO PPP

Challenges across the PPP lifecycle can be broadly classified into:

Financing Issues:

- Financing issues, including aggressive bidding, underpricing of projects, and funding constraints (debt and equity).

- Project sponsors in PPP projects depend hugely on commercial banks for financing the debt portion of the project. The delay in infrastructure projects leads to increase in NPAs, which in turn leads to vicious cycle of lower credit to PPP projects.
- Project delays and aggressive bidding have resulted in poor recovery from the projects
- Delays in execution of projects lead to equity getting trapped in ongoing projects, thus not being available for newer projects.

Capacity and procedural challenges: lack of efficient project preparation activities, delay in land acquisition, delays in obtaining requisite approvals and clearances, and poor project monitoring activities.

Policy, regulatory and institutional gaps: Absence of regulators or multiplicity of regulators results in many of these issues and disputes being unresolved, leading to litigations and cases. This in turn leads to delays or cancellation of projects and results in cost escalation, thereby making the projects unviable.

STRATEGIES NEEDED TO IMPROVE FRAMEWORK OF PPPS- KELKAR COMMITTEE RECOMMENDATIONS

Revisiting PPPs:

- PPP model requires the involvement of a private partner to leverage financing and improve operational efficiencies. Therefore, state owned enterprises or public sector undertakings should not be allowed to bid for PPP projects.
- PPPs should not be used by the government to evade its responsibility of service delivery to citizens.
- This model should be adopted only after checking its viability for a project, in terms of costs and risks. Further, PPP structures should not be adopted for very small projects, since the benefits are not commensurate with the costs.
- Currently, PPP contracts focus more on fiscal benefits. The focus should instead be on service delivery for citizens. Further, fiscal reporting practices and performance monitoring of PPPs should be improved.

Risk allocation and management:

- PPP contracts should ensure optimal risk allocation across all stakeholders by ensuring that it is allocated to the entity that is best suited to manage the risk.
- A generic risk monitoring and evaluation framework should be developed covering all aspects of a project's lifecycle.
- Guidelines for risk allocation should be formulated.

Strengthening policy and governance:

Some countries have a legal framework for PPPs in the form of PPP act/law/policy which clearly spells out the objectives, scope and implementing principles of the PPP program.

- Ministry of Finance may develop a national PPP policy document.
- Formulating a PPP law,
- Prevention of Corruption Act, 1988 should be amended to distinguish between genuine errors in decision making and acts of corruption by public servants.

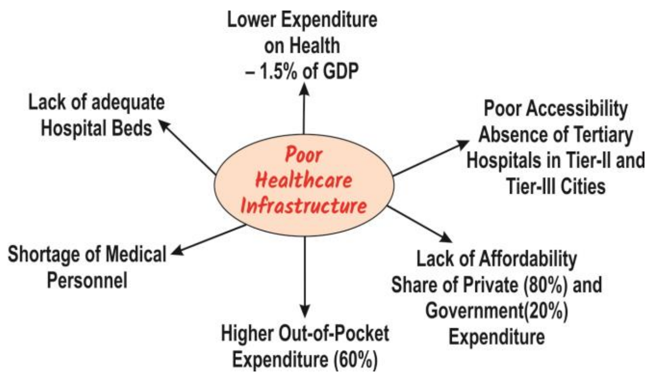
Strengthening institutional capacity:

- The capacity of all stakeholders including regulators, authorities, consultants, financing agencies, etc. should be built up. A national level institution should be set up to support institutional capacity building activities, and encouraging private investments with regard to PPPs.
- Independent regulators must be set up in sectors that are going for PPPs.
- Infrastructure PPP Project Review Committee may be set up to evaluate PPP projects.
- Infrastructure PPP Adjudication Tribunal should also be constituted.

Strengthening contracts: Since infrastructure projects span over 20-30 years, a private developer may lose bargaining power because of abrupt changes in the economic or policy environment. The Committee recommended that the private sector must be protected against such loss of bargaining power. This could be ensured by amending the terms of the PPP contracts to allow for renegotiations.

►PPP IN HEALTHCARE

The COVID-19 pandemic has exposed the deep-rooted flaws in our healthcare sector. Hence, there is a need to mobilise resources from both Public and Private sector through PPP to improve the health outcomes.



The UN SDG-17 has highlighted that PPP can help in ensuring 4 A's of Healthcare- Accessibility, Affordability, Availability and Awareness. The PPP can be leveraged to transform healthcare sector in following ways:

Improving the efficiency of hospital management by handing over the management of public hospitals to private partners with the responsibility for its up gradation. The Interest of the poor could be protected through reimbursement of the fees by the Government. This would have multiple benefits such as expansion of healthcare facilities, decrease in Government's burden and leveraging private sector's expertise in terms of human resources and equipment.

Addressing the shortage of Medical Personnel by setting up new Medical Colleges in PPP Mode and linking them to existing district hospitals.

Reducing out-of-pocket expenditure by enabling poor people to get treatment in the private hospitals and reimbursing their costs.

Addressing Accessibility and Affordability by contracting out the management of the Primary Healthcare Centers (PHCs). PPP agreements can also be signed with the Private Laboratories to provide round-the-clock tests.

Ensuring Affordable Medicines through the expansion of Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)

PPP Investment in IT Infrastructure to provide Universal Health Coverage (UHC) on the basis of recommendations of Srinath Reddy Committee.

Improving Preventive Care by engaging with NGOs for information dissemination and capacity building of ASHA workers.

Cross country experiences reveal that countries which have adopted PPP have much better healthcare infrastructure. Hence, the recent crisis has to be turned into an opportunity to bring in structural changes by rejuvenating PPP.

►HAM MODEL OF PPP

Presently, the Government uses different PPP Models such as BoT, EPC and HAM for construction of National Highways (NHs). However, HAM has emerged as a dominant model due to its inherent advantages over other models.

The features of the PPP Models are as shown below:

PPP Model	Role of Private Sector	Role of Government	Risks
Build -Operate-Transfer (BoT)	Build, Finance, Construct, Maintain and Transfer	Minimal	Private Sector
Engineering Procurement Construction (EPC)	Design, Procure raw materials. Construct	• Funding • Land acquisition • Collect user fees and Maintenance	Government
HAM	• 60% Funding • Build and Maintain	• Upfront Funding of 60% in Instalments. • Collect user fees and pay Private sector in form of annuities	Both

The HAM combines features of BoT and EPC and hence emerged as preferred model due to following reasons:

Equitable Risk Sharing: Under BoT, the private sector faces considerable risk in form of delays in clearances, lower traffic, lower toll collection etc. While, EPC leads to higher financial burden on the Government.

Lower Financial Burden on Government: 60% of the upfront project cost is provided by the private sector. Government's financial support is in the form of Installments.

Lower burden on Banks: Private sector financing in form of equity and debt and hence need for Bank loan reduces.

Timely completion of project due to active involvement of Government.

Proper Maintenance of NHs etc.

The HAM model has great potential in boosting private sector Investment in other PPP projects such as metro rail projects and hence need to be explored.

►SWISS CHALLENGE METHOD

The Swiss Challenge method (SCM) is used for awarding PPP projects. Under SCM, an interested party initiates a proposal for a project. The government then invites proposals from other parties. On the receipt of these bids, the original contractor gets an opportunity to match the best bid.

Private Sector Company "A" Identities a Particular project on its own (Let's say, Modernisation of Existing Railway Station or Construction of New National Highway)

↓

Company "A" submits the detailed proposal to the Government with specifications including Financing and Technical requirements

↓

Expert Committee of Government reviews the Proposal and okays it. Calls for open bidding from other Private Sector entities.

↓

- **Lets' say, Company "B" puts forward the best proposal to the Government.**
- **Company "A" would have "Right of Refusal" i.e., it can match up the bid put forward by Company "B" and win the contract.**
- **Else Contract awarded to Company "B".**

The SCM has been used for awarding PPP projects such as **Railway stations, Monorail project, Mumbai-Pune Hyperloop project** etc. The SCM can provide a fillip to the **National Monetisation Pipeline** and address problems faced in PPP projects.

BENEFITS

- Provides Innovative solutions as projects are identified by the Private sector on their own.
- Ensure certainty of success as it has willing partner right from the start.
- Reduce Time and cost as pre-project studies are conducted in advance.
- Ensures greater cooperation between Government and private sector.
- Government can choose the best alternative among various options.
- Can be used for technologically advanced projects such as Hyperloop Transportation system.

Presently, there is lack of uniformity in state Governments' policies for using SCM. Hence, as highlighted by NITI Aayog, there is a need for adoption of National Policy framework to implement SCM in a standardised manner.

►SOCIAL INFRA-PPPS ELIGIBLE FOR VIABILITY GAP FUNDING

ABOUT VIABILITY GAP FUNDING (VGF) SCHEME: Aims at supporting infrastructure projects that are economically justified but may not be financially viable (for example, Construction of Highway between two cities with lower traffic volume). Provides Viability Gap Funding in the form of Grant (*not in terms of loan*) up to 20% of the Total Project Cost (TPC). The State Government or Government entity that owns the project may provide additional grants out of its budget up to further 20% of the TPC.

REFORMS INTRODUCED UNDER AATMA NIRBHAR PACKAGE: In order to boost Social Infrastructure, the Government will enhance the quantum of Viability Gap Funding (VGF) up to 30% each of Total Project Cost as VGF by the Centre and State/Statutory Bodies. ***For other sectors, VGF existing support of 20 % each from Government of India and States/Statutory Bodies shall continue***.

SECTION-11

FOOD PROCESSING INDUSTRIES

Previous Year Questions

SUB- THEME	YEAR	QUESTION
Food Processing Industries	2015	What are the impediments in marketing and supply chain management in industry in India? Can e-commerce help in overcoming these bottlenecks?
	2017	What are the reasons for poor acceptance of cost effective small processing unit? How the food processing unit will be helpful to uplift the socio-economic status of poor farmers?
	2018	Examine the role of supermarkets in supply chain management of fruits, vegetables and food items. How do they eliminate number of intermediaries?
	2020	What are the challenges and opportunities of food processing sector in the country? How can income of the farmers be substantially increased by encouraging food processing?

►FOOD PROCESSING SECTOR IN INDIA: OPPORTUNITIES AND CHALLENGES

Food processing is a technique of manufacturing and preserving food substances in an effective manner with a view to enhance their shelf life; improve quality as well as make them functionally more useful. Food processing sector is a sunrise sector in India. It provides many positives prospects as well as face many challenges. Hereby discussing the prospect of this sector in India, challenges faced and steps needed.

IMPORTANT DRIVERS

- India is the world's second–largest producer of fruits and vegetables.
- India has second largest production of marine products, and meat and poultry
- India is the single largest producer of milk in the world, with the production estimated at 137.7 MT.
- India has the largest livestock population across the globe, which is equal to 512 million, including 119 million milch (in-milk and dry) animals, 135 million goats and 65 million sheep.
- The segment contributes about 25 per cent to the country's farm Gross Domestic Product (GDP).

PROSPECTS OF FOOD PROCESSING IN INDIA

- Strong demand growth
  - Demand for processed food rising with growing disposable income, urbanisation, young population and nuclear families
  - Household consumption set to double by 2020
  - Changing lifestyle and increasing expenditure on health and nutritional foods
- Food processing hub
  - India benefits from a large agriculture sector, abundant livestock, and cost competitiveness
  - Investment opportunities to arise in agriculture, food infrastructure, and contract farming
  - Diverse agro-climatic conditions encourage cultivation of different crops
- Increasing investments
  - Investments, including FDI, would rise with strengthening demand and supply fundamentals
  - Launch of infrastructure development schemes to increase investments in food processing infrastructure
- Policy support
  - Sops to private sector participation; 100 per cent FDI under automatic route.
  - Promoting rationalization of tariff and duties relating to food processing sector.
  - Setting up of National Mission on Food Processing

CHALLENGES AND STEPS NEEDED

- Poor quality of produce- not of processing standard.
- Lack of Integrated domestic market'
- Lack of quality standards and poor focus on good manufacturing practices
- Losses high among perishables such as fruits and vegetables
  - Crop losses ranged between 7-16% among fruits and around 5% among cereals in 2015.
  - Perishables such as fruits and vegetables are more prone to losses as compared to cereals. Such crop losses can occur during operations such as harvesting, thrashing, grading, drying, packaging, transportation, and storage depending upon the commodity.
- **Inadequate food processing infrastructure**: forced to sell their produce soon after harvest, irrespective of the prevailing market situations.
- **Cold chain infrastructure**: Cold storage needs to be coupled with logistical support to facilitate smooth transfer of harvested value from farms to distant locations.
- **Transport Facilities**: The Committee on Doubling Farmers Income had recommended that railways needs to upgrade its logistics to facilitate the transport of fresh produce directly to export hubs. This includes creation of adjoining facilities for loading and unloading, and distribution to road transport.

MEGA FOOD PARKS

The Mega Food Parks scheme was launched in 2008. It seeks to facilitate setting up of food processing units. As of March 2018, out of the 42 projects approved, 10 were operational.

The Standing Committee on Agriculture noted certain reasons for delay in implementation of projects under the scheme. These include: (i) difficulty in getting loans from banks for the project, (ii) delay in obtaining clearances from the state governments and agencies for roads, power, and water at the project site, (iii) lack of special incentives for setting up food processing units in Mega Food Parks, and (iv) unwillingness of the co-promoters in contributing their share of equity.

Further, the Standing Committee stated that as the scheme requires a minimum area of 50 acres, it does not to promote smaller or individual food processing and preservation units. It recommended that smaller agro-processing clusters near production areas must be promoted.

The Committee on Doubling Farmers Income recommended establishment of processing and value addition units at strategic places. This includes rural or production areas for pulses, millets, fruits, vegetables, dairy, fisheries, and poultry in public private-partnership mode.

Role of E-commerce in improving supply chain management

E-commerce helps in:

1. Reducing the distribution and transactions costs.
2. Increasing the speed of product development.
3. Providing more information for buyers and sellers.
4. Increasing the options of customer and their access to suppliers.
5. Reducing the time intervals.