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GENERAL STUDIES (TEST CODE : 1432)

Name of Candidate	DARPAN AHLUWALIA		
Medium Eng./Hindi	ENG.	Registration Number	214713
Center		Date	10th JULY '19

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
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20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
   उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न–पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are **TWENTY** questions printed in **ENGLISH & HINDI**
   इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. **All questions are compulsory.**
   सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
   प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other that the authorized one.
   प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न–सह–उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
   प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
   उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

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EVALUATION INDICATORS

1. **Contextual Competence**
2. **Content Competence**
3. **Language Competence**
4. **Introduction Competence**
5. **Structure - Presentation Competence**
6. **Conclusion Competence**

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

1. Explaining the reasons behind India's lower female labour force participation rates (LFPR), list the steps that have been taken to augment it. What more needs to be done? (150 Words) 10

भारत की निम्न महिला श्रमबल भागीदारी दर (LFPR) के पीछे उत्तरदायी कारणों को स्पष्ट करते हुए, इसे बढ़ाने हेतु उठाए गए कदमों को सूचीबद्ध कीजिए। साथ ही, बताइए कि इस दिशा में और क्या किए जाने की आवश्यकता है?

High female LFPR is integral to SDG 1 and 5 (gender equality). It has declined to 24% (Economic survey 2018).

Reasons behind a low percentage:-

- SUPPLY side factors:-
  - (UN-Women) 50% women drop out of labour force post marriage.
  - Increase in household income leads to crowding out of females.
  - Underlying social norms - child birth and care; ceremonies; elderly well being etc.
  - Domestic duties are unpaid, hence not included as work.
  - Other issues: Menstrual taboos; mobility; poor skill set; safety etc.

- DEMAND side factors:-
  - Non gender neutral laws, eg - Maternity Benefit act, leads to employer preference for men.

• Demand for highly skilled jobs; automation increase; digital divide etc. create less opportunities.

Steps taken :-
- Funds : Rashtriya Mahila Kosh ; Nirbhaya fund ; Maternity Benefit etc.
- Safety : Prevention of sexual Harassment at workplace act ; Toilets ; Working women hostels
- Skills : STEP scheme ; Start up India ; Stand up India ; MGNREGS.
- Mobility : female conductors and drivers ; separate Metro and train compartments
- Laws : Equal Remuneration act ; Wage code ; Article 39d (equal wages), etc.

To complement this, following needs to be done :-

- Gender neutral laws : Eg: Maternity benefit act, to not stereotype role of women.
- International practices : Nepal → Home based care of children with mothers taking turns.
- CSR : Eg : Unilever's shakti program.
- Employment : explicit sex ratio in every department ; apprenticeships etc.

⇒ These need to be urgently done as 10% increase in LFPR leads to $700Bn increase in GDP.

2. By rebalancing project risks between the public and private sectors, the HAM model has encouraged investments in the road infrastructure sector. Discuss. (150 words) 10

सार्वजनिक और निजी क्षेत्रकों के मध्य परियोजना जोखिमों को पुनर्संतुलित कर, HAM मॉडल ने सड़क अवसंरचना क्षेत्रक में निवेश को प्रोत्साहित किया है। चर्चा कीजिए।

India has the largest PPP in road infrastructure globally. The HAM (Hybrid Annuity Model) has potential to increase it further.

Mechanism: HAM

60% BoT-Annuity | 40% EPC

NHAI releases 40% cost → 60% cost by developer → Assets created → Annuity to private player depending upon value created

	Financial risk	Revenue risk	O&M
- BOT Annuity	Private	Govt.	Private
- EPC	Govt.	Govt.	Govt.
- HAM	Govt. + Private	Govt.	Private

Rebalancing of project risks :-
- Government pays only 40% cost initially.
- Better debt availability to private play in case of HAM.
- No tolling/revenue risk to private players.

- Government revenue is high as there is no underquoting by private sector.
- Overall capital availability for infrastructure augmented.
- 90% land acquisition and major clearances already on board, decreases time and cost overruns.
- Inflation adjustment in project cost is done.

Hence, it is a win-win situation for infrastructure, government and private sector.

However, certain risks remain :-
- Administrative hurdles
- Poor grievance redressal mechanism leads to litigations.
- Funding constraints with twin Balance sheet syndrome.

⇒ Hence, it is pertinent to follow Kelkar committee recommendations of basing contracts on services, not fiscal benefits. Further, there needs to be an Institute of Excellence in PPP.

3. Examine the need for a comprehensive policy on e-commerce in view of its domestic expansion as well as safeguarding India's interests globally.
(150 words) 10

ई-कॉमर्स पर एक व्यापक नीति की आवश्यकता का इसके घरेलू विस्तार के साथ-साथ वैश्विक स्तर पर भारत के हितों की सुरक्षा को देखते हुए परीक्षण कीजिए।

e-Commerce sector has a growth rate of 17% per annum, with India leading per month per smartphone data usage at 7.85 GB (- Ericsson).

Hence, to give thrust to domestic sector, while having high growth rate, with citizen centricity, a policy is required.

Need of such policy is:-

- Data: India is net data exporter. Regulations are required to make best use of Big Data and safeguard security and privacy.

- Domestic industry: To protect the domestic start ups, sandbox approach needs to be followed.

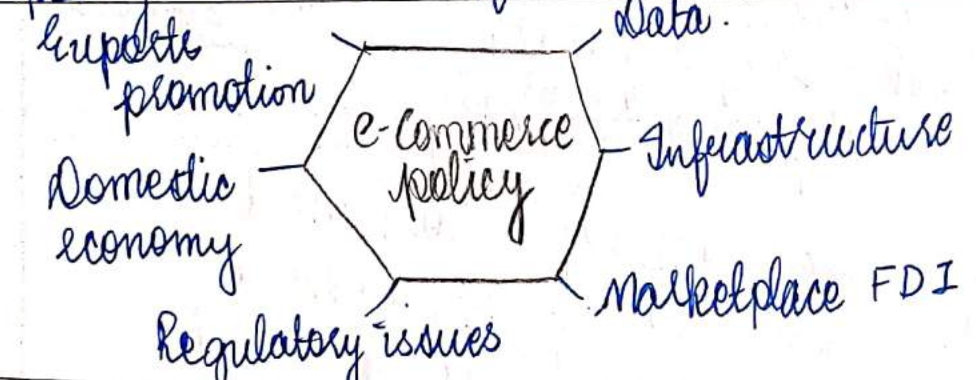
- Brick and mortar stores: Cartelization and heavy discounts online impact their viability.

- Consumer interests : Eg - Quality concerns; expiry dates; false marketing; grievance redressal etc.

- Infrastructure : To have a guided policy on Ease of doing Business by creating adequate infrastructure.

- Regulation : Eg - Taxation (France's GAFA tax); e-consumer courts ; local entity presence etc.

To include all these concerns, the draft e-commerce policy has been formulated :-



⇒ Further, there is a need to take part in WTO e-commerce negotiations and create a 'plug and play' model for domestic startups to form a $5Tn economy.

4. In view of the growing significance of FinTech innovations, discuss the potential and challenges of mainstreaming FinTech in Indian economy. (150 words) 10

फिनटेक (FinTech) नवाचारों के बढ़ते महत्व को देखते हुए, भारतीय अर्थव्यवस्था में फिनटेक को मुख्यधारा में लाने की संभावनाओं और चुनौतियों पर चर्चा कीजिए।

India stands second in the Fintech Adoption Index (-E&Y). It will form the further basis of growth of Digital India and Make In India.

Its significance and potential are:-

- It can utilize increase in smart phone penetration to 64%, and increase in data usage (9.85 GB/ phone/month).
- It can create more financial inclusion via online loans, insurances and payment.
- Potential to foster rural micro-entrepreneurship via CSC infrastructure.
- Better targeting and less leakages leading to decrease in subsidy bill.
- Tap transactions transparently, and

thereby increase tax base.

But, challenges are :-
- Indian market is traditionally cash oriented, and MSME dominant.
- Ambitious investment is required to fulfill BharatNet targets.
- Lacunae in cyber security.
- It can be hindered by poor digital and financial literacy.
- Issues related to cryptocurrency → Banned by RBI.
- Lesser seed capital available to fintech start ups.

Hence, to give it stimulus,
→ a Funds of funds for MSMEs should be formed, with a 24x7 helpline. Cyber security and awareness should be increased. Fintech conclaves and regulatory sandbox by RBI is the way forward.
Bali Fintech Agenda should be adhered to.
(IMF-World Bank)

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5. With India striving to achieve its development objectives, examine how blue economy can help in pursuing the objectives of economic development and ecological sustainability. **(150 words) 10**

भारत द्वारा अपने विकास उद्देश्यों को प्राप्त करने के प्रयास में, परीक्षण कीजिए कि किस प्रकार नीली अर्थव्यवस्था आर्थिक विकास और पारिस्थितिकीय संधारणीयता के उद्देश्यों को प्राप्त करने में सहायता कर सकती है।

India aims at inclusive growth and $5 Tn economy target by 2024. With 7517 km coastline and 2 mn km² EEZ, Blue economy becomes important to achieve it.

- Economic Development :

* Mariculture exports : It will lead to increase in farmer income and forex earnings.
* Natural resources and minerals : Eg: Rare earth elements; PMNs etc. can be used in high tech electronics etc.
* Shipping Industry : It will create optimal multimodal mix, and decrease in logistics cost (currently : 14% of GDP).
* Tourism : It will provide employment to youth of coastal

communities, and has many forward and backward linkages.

- Ecological sustainability :-
  * Waste management : Waste and effluent treatment will help in achieving SDG 14.
  * Shelterbelts : greening of coastal areas will create carbon sinks and buffer against storm surge, cyclones etc.
  * New technologies : eg : 3D printing of reefs; bioremediation etc.
  * Maintaining biodiversity : Ban on bottom trawling; TEDs (Turtle Exclusion devices); 60d moratorium on fishing in breeding season (B. Meenakumari committee) etc.

⇒ To achieve these, sovereign blue bonds (like Seychelles), and mitigating associated problems like trafficking of drugs and arms, oil spills, marine pollution, fish overexploitation etc. is needed.

6. Reliance on borrowings for capital expenditure in railways reflects a weakening financial position. Comment on the statement and discuss ways in which better resource generation and utilisation can be achieved therein.

(150 words) 10

रेलवे में पूंजीगत व्यय के लिए उधारी पर निर्भरता कमजोर होती वित्तीय स्थिति को प्रतिबिंबिति करती है। इस कथन पर टिप्पणी कीजिए तथा उन उपायों पर चर्चा कीजिए जिनसे इसमें बेहतर संसाधन सृजन और उपयोगिता प्राप्त की जा सकती है।

Operating ratio of Railways has decreased from 98.4% (2017-18) to 95% (Budget 2019).

However, reliance on borrowings is still a big concern.

Eg: IRFC has taken recently ADB's largest loan till now.

This is because of:-

- Post 7th Pay Commission, increase in salaries and pensions
- Modernization projects (Eg - LHB coaches; 100% electrification)
- High operating ratio (more than 95%) because of cross subsidization (of passenger trains).
- PPP route yet to be explored. (Debroy committee)
- Other activities (non core): schools, hospitals etc.

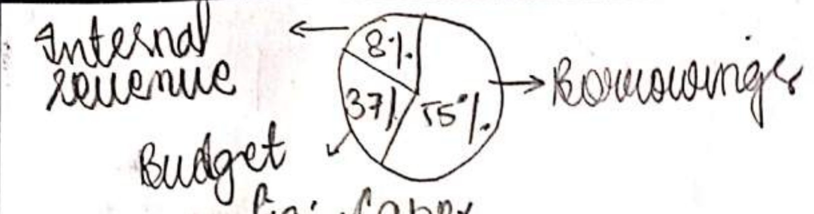

fig: Capex

For better resource generation :-
- Utilize Nirbhaya fund (eg - CCTV cameras) and CRIF (Central Road and Infra fund)
- Non fare revenue - Advertisements; piezoelectric sheets on station floor; solar panels; lease land.
- PPP - Public sector tracks with private rakes (Debroy committee)

For better resource utilization :-
- Free WiFi and other amenities only at busy stations.
- Come out of peripheral activities, like schools/hospitals/catering etc.
- Use of cost efficient technology.
- Fast tracking of DFCs and high-speed rails.
- Better connectivity with dry ports and logistics parks.

⇒ All these will aid in improving its financial position.

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7. With water increasingly becoming a scarce resource, large scale adoption of micro irrigation techniques could prove to be a game changer in India. Analyse. Also enumerate various steps taken by the government to promote micro irrigation in India.

(150 words) 10

जल के उत्तरोत्तर दुर्लभ संसाधन बनते जाने के कारण, भारत में सूक्ष्म सिंचाई तकनीकों का व्यापक पैमाने पर अंगीकरण निर्णायक सिद्ध हो सकता है। विश्लेषण कीजिए। साथ ही, भारत में सूक्ष्म सिंचाई को बढ़ावा देने हेतु सरकार द्वारा उठाए गए विभिन्न कदमों को भी सूचीबद्ध कीजिए।

Farming sector consumes more than 80% of fresh water today. With declining productivity and scarcer water, microirrigation is at the core of more crop per drop.

Microirrigation refers to direct application of water above and below soil surface. Eg - Drip and sprinkler irrigation.

It can be a game changer as :-
- It can arrest water table depletion.
- Runoff will reduce, leading to less contamination of water bodies.
- Fertilizer use efficiency will improve due to direct targeting of root zone
- Subsidy bill will decrease due to less water and power usage.

- It is useful especially in dry land farming.

Various steps taken are :-

- PM Krishi Sinchai Yojana - It focuses on improving more crop per drop.
- National Mission on Sustainable Agriculture - Microirrigation extension activities, subsidized equipments, machine banks etc.
- NABARD - Microirrigation fund of ₹5000 cr to give credit for such activities.
- Extension services, targeting farmers, FPCs and FPOs by KVKs and CSCs.
- MSP incentives : Increased for coarse cereals (nutricereals) i.e. low water guzzling crops.

⇒ Further, Vaidyanathan committee recommends to price irrigation water, which will decrease usage via behavioural economics (Economic Survey 2019). Model farms and farmer led revolution remains the key

8. Livestock farming not only contributes to climate change but is also affected by it. Elaborate the statement and discuss some measures that can be taken to make livestock farming more sustainable as well as resilient.

(150 Words) 10

पशुधन खेती (लाइवस्टॉक फार्मिंग) न केवल जलवायु परिवर्तन में योगदान देता है, बल्कि इससे प्रभावित भी होता है। इस कथन का सविस्तार वर्णन कीजिए और पशुधन खेती को अधिक संधारणीय के साथ-साथ लचीला (रिज़िल्यंट) बनाने हेतु उठाए जा सकने वाले कुछ कदमों की विवेचना कीजिए।

According to 19th livestock census, India has the highest population at 125cr. Its importance is especially for small farmers as it gives food and economic security, both.

But it also $\boxed{\text{contributes to climate change}}$:-

- 14.5% Greenhouse gases are released due to primary sector
- Dung releases methane, carbon dioxide, nitrogen dioxide etc.
- Enteric fermentation is caused due to methanogenic bacteria in intestine.
- Destruction of tree cover to create pasture land and farms.
- Use of solid dung cakes for cooking also causes air pollution and climate change.

anything this margin (इस भाग में कुछ ना लिखें)

Impact of climate change :-

Direct
- Heat stress
- Exhaustion
- Decline in productivity
- Death

Indirect
- Fodder scarcity
- Disease spread
- Less nutrition
- Infections
- Less milk yield

→ In order to make it more resilient :-
- 100% vaccination should be ensured.
- Filling up of all vacancies in veterinary hospitals.
- Adequate funding and technicians, for ART, semen banks, etc. for indigenous breeds.
- Provision of fodder banks and cattle ponds
- Timely disease surveillance.

→ In order to make it more sustainable :-
- Adequate use of Dairy development and Infrastructure fund.
- Assistance to cooperatives - credit; bulk milk chillers; quality certification; marketing etc.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

9. The cropping pattern of a region is influenced by geo-climatic, socio-cultural, economic, historical and political factors. Substantiate with relevant examples. **(150 words) 10**

किसी क्षेत्र का शस्य प्रतिरूप भू-जलवायविक, सामाजिक-सांस्कृतिक, आर्थिक, ऐतिहासिक और राजनीतिक कारकों से प्रभावित होता है। प्रासंगिक उदाहरणों के साथ पुष्टि कीजिए।

India grows multiple crops with multiple varities (for eg: Aus, Aman and Boro of rice) due to following factors $\boxed{\text{influencing}}$ cropping pattern:

- $\boxed{\text{Geoclimatic}}$:-

- Precipitation
  - Low: Coarse grains (Eg - Rajasthan)
  - High: Wet paddy (Eg - Assam)

- Topography
  Eg: Tea, coffee plantations on hill slopes (Assam; Darjeeling; Kerala)

- Soil
  Eg: Black cotton soil in Deccan plateau
  Laterite soil → Tea; coffee; rubber etc.

- Insolation
  Shift of sugarcane belt from north to south due to higher insolation, leading to more sucrose content and growth period.

- Socioultural :-
  Eg - Rice eating belt in East and South (Black rice - Manipur)

- Economic :-
- Price : Wheat - Rice cycle in Punjab
- Farm size - [Less : Subsistence farming.
  Large: Commercial, extensive farming
- Labour : Eg : Plantations in North East
- Other inputs : Subsidized seeds; chemicals; marketing etc.

- Historical : Tea plantations in Assam, Darjeeling etc.

- Political :-
  It includes factors like MSP (inter-crop disparity), subsidies etc.

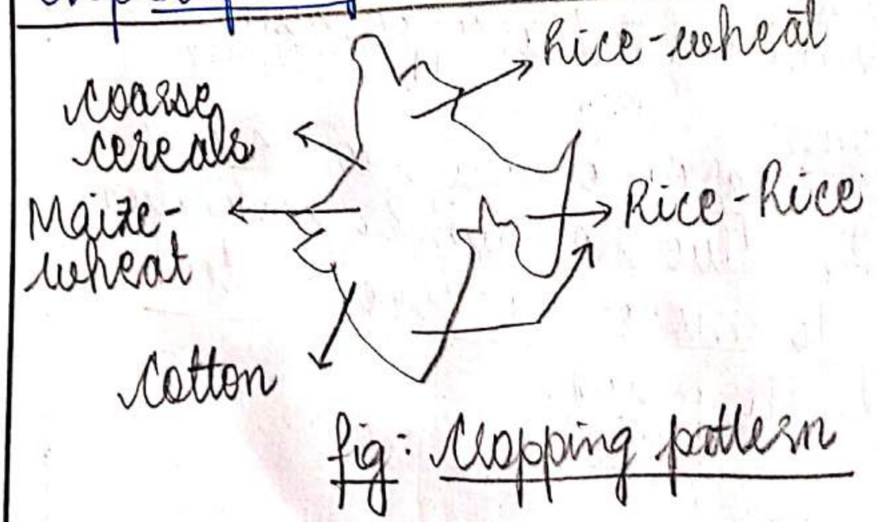


fig: Cropping pattern

10. A developed Inland Waterway Transport (IWT) will not only augment the overall transport capacity of the country, but also help correct the multi-modal transport mix. Discuss. **(150 words) 10**

एक विकसित अंतर्देशीय जलमार्ग परिवहन (IWT) न केवल देश की समग्र परिवहन क्षमता को बढ़ाएगा, अपितु इससे मल्टी-मॉडल परिवहन मिश्रण को सुधारने में भी सहायता मिलेगी। चर्चा कीजिए।

With Jal Marg Vikas Yojana (IW-1), and multi modal logistics park at Jogijhopa (Assam), and other projects, India is set to utilize 14,500 km of inland waterways.

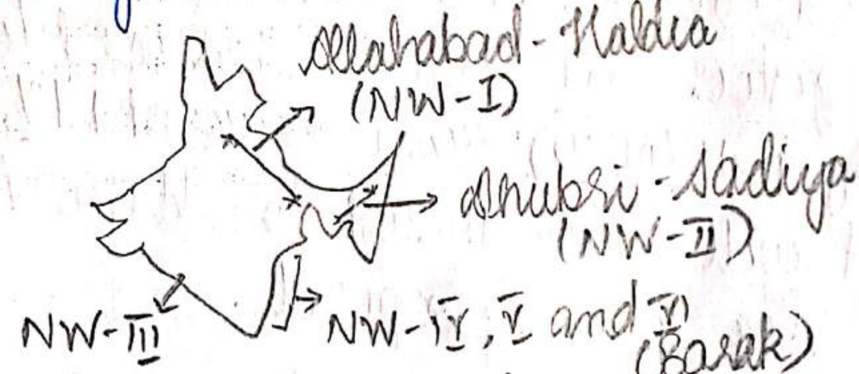


fig: Inland waterways

It will augment transport capacity by:-

- Addition of capacity of 14,500 km of waterways.
- It is the cheapest mode with no land acquisition and minimal infrastructure.
- It is easy to transport heavier cargo.
- carbon footprint also decreases.

- International connectivity - Eg: Waterways in North East connecting with Myanmar and Bangladesh.

It will $\boxed{\text{correct}}$ multimodal mix as:-
- It will declog roads and railways.
- It will thus cause less time and cost overruns.
- Logistics cost can be reduced to 10% of GDP (OECD) from current 14%.
- It will give thrust to Make In India and employment.

⇒ However there are $\boxed{\text{concerns}}$ like:-
- Low water depth for larger vessels.
- Multiple bodies (Eg: Port authorities, state governments etc.)
- Oil spills, marine pollution etc.
- Restrictions on sea-river movement.

⇒ Hence, need is of coordination between states and DG, shipping, timely dredging, greater autonomy to IWAI and PPP utilization.

11. Can the consolidation of banks help in stemming the existing problems in the banking sector? Discuss. (250 words) 15

क्या बैंकों का समेकन बैंकिंग क्षेत्रक में वर्तमान समस्याओं से निपटने में सहायता कर सकता है? चर्चा कीजिए।

From Narsimhan committee of 1991 to PJ Nayak committee of 2014, consolidation of banks is a common thread.

Narasimhan committee 1991 — Khan committee 1997 — PJ Nayak 2014 — SBI merger 2017 — Vijaya Bank, and Bank of Baroda 2019

fig: Timeline

It serves following benefits :-

- Economy of scale : It leads to better resource utilization and efficiency.
- More capital : Greater liquidity is created. eg: SBI became one of top 50 largest banks.
- Shock bearing capacity : Stronger bank can absorb losses of weaker bank.
- Geographical reach : For eg - Vijaya bank in south and, bank of Baroda in Western India.

- Liquidity : Greater capital base
  ↓
  More liquidity
  ↓
  Lending
  ↓
  Increase investment
- Corporate governance : Best governance practices are imbibed.
- Efficiency : Currently, there are 21 PSBs leading to cannibalization of business of each other.

However, it creates following problems:-

- Employee concerns : Different work culture ; retrenchment ; reallocation of work etc.
- Overlapping branches : Some have to be closed, hence, impacting financial inclusion.
- Technology platforms : Issues w.r.t. their convergence.
- Toll on stronger bank : Due to high

NPAs of weaker bank.
- corporate governance ethics : government takes the call, being the dominant shareholders (Alternative Mechanism). This is anti thetical to other bank shareholders.
- Alone : There is no one solution : other 'Indradhanush' reforms are also needed.

⇒ Thus, consolidation can stem problems if complemented with strong credit appraisal, risk management, and other 3Rs of recapitalization, recognition and resolution. It should be guided by commercial considerations, not political, in accordance to Narasimhan committee model :-

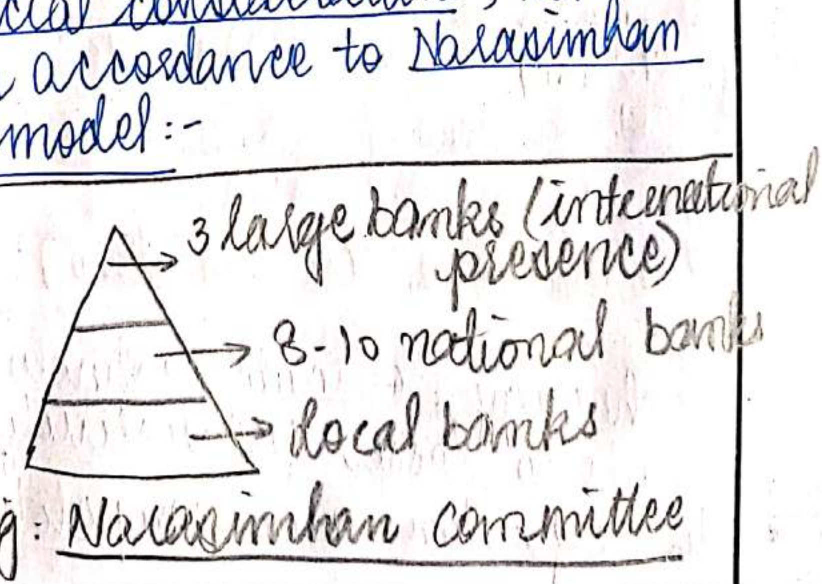


fig: Narasimhan committee

12. Why has the contribution of manufacturing sector, as a percentage of the GDP, remained stagnant in the recent years? In this context, analyse the achievements of National Manufacturing Policy, 2011 with regards to its intended objectives. **(250 words) 15**

विगत वर्षों में GDP के प्रतिशत के रूप में विनिर्माण क्षेत्रक का योगदान स्थिर क्यों रहा है? इस संदर्भ में, अपने लक्षित उद्देश्यों के संबंध में राष्ट्रीय विनिर्माण नीति, 2011 की उपलब्धियों का विश्लेषण कीजिए।

Manufacturing sector contribution has remained stagnant since 1980s (16% of GDP). It is crucial as 97 lakh enter workforce every year. (Economic Survey 2019)

Causes of stagnation :-

- Dwarf firms : (less than 100 employees and age more than 10 yrs) This is due to perverse incentives. Eg: Industrial dispute act : Applicable on factories with more than 100 workers

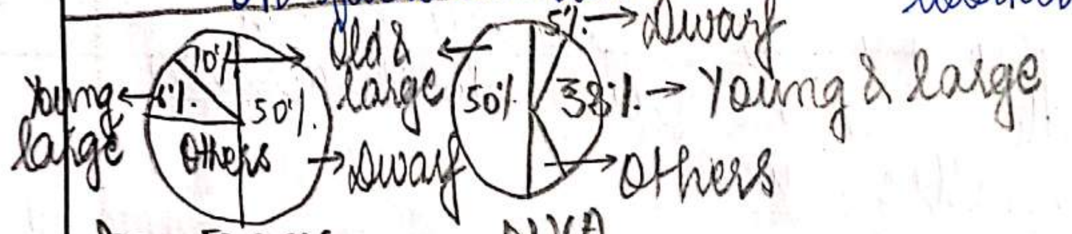


fig: Firms (number) NVA (contribution)

- Technology : Obsolete technology usage leads to lesser productivity, diversification and competitiveness.

- Rigid labour laws : eg:-
  - More than 44 Central and State laws
  - Retrenchment threshold is low (100)
  - Overtime hours are less at 50/Quarter
- Logistics cost : 14% of GDP
  There is inadequate multimodal connectivity and shortage of warehouses.
- FTAs : Eg : Bangladeshi tariffs less in EU due to coverage under EBA initiative ('Everything But Arms').
- Taxation : High corporate tax (25%/30%); inverted tax duties; high customs on inputs (10% + cess).
- Labour : There is industry-academia gap leading to gap between skill demand and supply.
- Land laws : Restrictions on FSI, land conversion rules etc.

⇒ The $\boxed{\text{NMP 2011}}$ aims at increasing its share to 25% of GDP (2022) via :-
- Decreasing logistics cost

- Increase export share
- Diversification of goods, and market
- Establishment of NIMZ
- Easy exit policy for start-ups
- Creation of land banks
- Focus on MSMEs and labour intensive sectors

NMP 2011 has led to :-

- 70 L jobs have been formalized between 2015-18. (NASSCOM)
- NIMZ, CEZ, industrial corridors etc. have led to more exports.
- Multi Modal logistic parks have led to decrease in time and cost.
- GST and other tax benefits have led to tax compliance ease. (Eg: Corporate Tax reduced to 25% for ₹400cr upto turnover).

⇒ However, certain $\boxed{\text{lacunae}}$ still remain, like small and unviable NIMZ, angel tax issues, multiple policies (CEZ/SEZ/DMIC/NIMZ) leading to thin spreading of resources and policies favouring small rather than young firms. These need to be revamped.

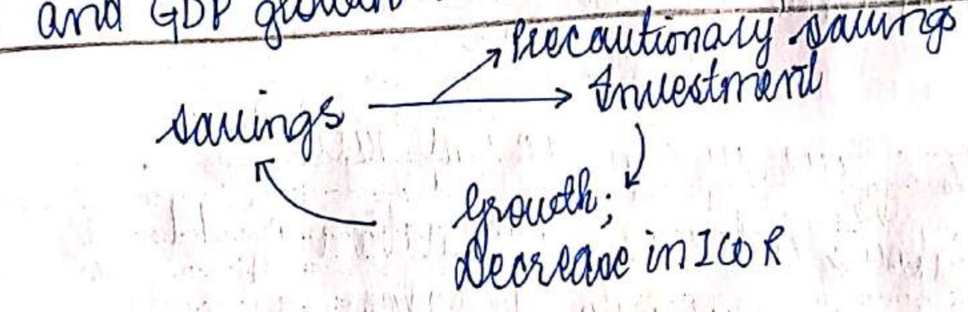
13. One of the goals that a developing economy aspires for is to bring down the Incremental Capital-Output Ratio (ICOR). In this context, what are the constraints that underlie the efficient conversion of savings rate to investments in the Indian economy? Also suggest some measures to improve this efficiency. **(250 words) 15**

एक विकासशील अर्थव्यवस्था जिन लक्ष्यों की आकांक्षा रखती है उनमें से एक वृद्धिशील पूंजी-उत्पाद अनुपात (इंक्रीमेंटल कैपिटल-आउटपुट रेश्यो: ICOR) में कमी लाना है। इस संदर्भ में, भारतीय अर्थव्यवस्था में बचत दर के निवेश में कुशल रूपांतरण के समक्ष आने वाली बाधाएँ क्या हैं? साथ ही, इसकी कुशलता में सुधार हेतु कुछ उपायों का भी सुझाव दीजिए।

ICOR refers to the additional unit of investment / capital required to increase output unit.

i.e.; $\boxed{ICOR = \dfrac{\text{Annual investment}}{\text{Annual GDP increase}}}$

→ savings and investment have a virtuous cycle effect (Economic Survey 2019) on ICOR decrease and GDP growth :-



But Indian economy is currently facing investment slowdown because :-

- savings : GDP ratio is 29% , and Investment is 26% of GDP.

- Household savings are declining. They are being put into financial assets.
- Investment requires high/long term liquidity, but savings are put into short term, easy liquiditable instruments.
- Mounting NPAs : credit offtake is expensive and lesser.
- Policies :- Restrictive labour and land laws
  - Dwarf firms perverse incentives
  - High corporate tax
- Legal system: Poor enforcement of contracts, leading to capital getting stuck, and time and cost increases.

Its efficiency can be improved by :-
- Labour codes : Amalgamation of 44 labour laws into 4 codes.
- Incentivize : Young firms, not dwarf firms; grandfathering of incentives.
- Logistics : Decrease to 10% of GDP cost by thrust on multimodal parks, dry

ports etc.

- Surjit Bhalla committee : Reforms in taxation ; long term infra bonds i.e. elephant bonds (from income declaration schemes).
- Focus on labour intensive industries ; Eg: Apparel ; textiles ; leather etc.
- Technology : It will lead to greater competitiveness, and better management system, via technology upgradation fund, industry-academia linkage, upskilling and reskilling labour.
- Online portal / Helpline : to connect with Ministry of Commerce, and Corporate Affairs.
- Multilateral level ; Participate in WTO e-commerce negotiations ; thrust on Bilateral Investment Treaties.

⇒ The recently formed Cabinet committees on Employment, and Skill Development will also aid in this. Thrust of efficiency improvement should be on MSMEs (45% manufacturing output).

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14. Highlight the factors responsible for rise in the number of start-ups in India in recent years. Analyzing the challenges in the existing start-up ecosystem, suggest some measures to resolve them. **(250 words) 15**

विगत वर्षों में भारत में स्टार्ट-अप की संख्या में वृद्धि के लिए उत्तरदायी कारकों पर प्रकाश डालिए। वर्तमान स्टार्ट-अप पारितंत्र की चुनौतियों का विश्लेषण करते हुए, उनका समाधान करने हेतु कुछ उपायों का सुझाव दीजिए।

India has the 3rd highest number of start ups (NASSCOM). With the 3Ds: Democracy, demography and demand, Indian startups have emerged due to the following $\boxed{\text{factors}}$:-

- Continuum of change : Innovators are encouraged since school; eg - Atal Tinkering labs; JIGYASA programme (KVIC- CSIR) etc.
- Ecosystem creation : RBI's regulatory sandbox for fintech start ups; Livelihood and business incubators.
- Definition : Amended to extend benefits to < less than ₹100 cr turnover / less than 10 yrs age.
- Labour : 95 L youth enter labour force every year.
- Funds : Funding less than ₹25 cr exempt for angel tax ; SIDBI's Fund

of Funds; credit guarantee fund etc.

- Market: Increase in base with rising aspirations of middle class; increase in smartphones and data usage; preferential (64%) public procurement etc.

However, there are some challenges :-

- Funds: Difficult to access SIDBI's Fund of funds; perverse incentives to dwarf firms.
- Global market: Challenges due to increase in protectionism; non-tariff barriers (eg- quality certificates)
- Logistics cost: It is at 14% of GDP.
- Angel tax: Multiple IT notices under section 56 of IT Act.
- Clearances: Marred by bureaucratic red tapism; increasing litigations; vested interests.

Measures to $\boxed{\text{resolve}}$ them are :-

- Online portal / helpline : To have a single window for availment and awareness of benefits.
- PPP Think tank institution (-Kelkar committee) needs to be set up.
- Start up fests and conclaves to showcase latest products.
- Land Bank corporation to ease out land acquisition.
- Research parks ; innovation hackathons etc
- Intellectual property awareness in colleges, schools, etc.
- Convergence of MMLP policy with technology and business incubators, to increase synergy.

⇒ Finally, there should be a 'plug and play' model for start-ups in sunrise sectors like food processing, fintech, tourism, etc.

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15. There is a high cost of compliance as well as complexities associated with existing labour laws at centre and state levels. Discuss. What steps have recently been taken by the central government to address these challenges? **(250 words) 15**

केंद्र और राज्य स्तरों पर वर्तमान श्रम कानूनों के साथ अनुपालन की उच्च लागत के साथ-साथ जटिलताएँ भी जुड़ी हुई हैं। चर्चा कीजिए। इन चुनौतियों से निपटने के लिए केंद्र सरकार द्वारा हाल में क्या कदम उठाए गए हैं?

Rigid labour laws are a hindrance to Make In India. 70% employees are in firms with less than 20 employees, and are only producing 12% output. (NITI Aayog).

High compliance cost and complexity is due to :-

- Retrenchment : Threshold is very low at 100.
- Overtime Hours : They're capped at only 50/quarter.
- Concurrent list : (Labour) Hence, multiple State and Central laws.
- Apprenticeship : There is very less focus on apprentices. Eg: India : 2.8 Lakh, Germany : 30 Lakh
- Laws provide perverse incentives to stay 'dwarf' (less than 100 employees).

eg: Industries Dispute act : Applicable to industries with more than 100 workers.

- 44 labour laws : Multiple and overlapping laws, leading to complexities and rent seeking.

→ Steps taken to address them are :-

- 4 labour codes
  - Occupational safety
  - Wages
  - Industrial relations
  - Social security

  will subsume 44 labour laws.
- Fixed term employment in all sectors to meet seasonal surge.
- Maternity benefit act : Central government contribution to employer's expenses.
- National Apprenticeship scheme : 25% of stipend, and ₹7500 for training reimbursed

- State led initiatives :-
Eg : Rajasthan : Flexibility in laws →
Factory act now applicable to :-
20 Workers with power → 40 Workers without power
(Previously, 10 and 20 workers - respectively).

- PM Shramyogi Maandhan Yojana :
Provision of ₹3k/month pension to unorganized sector workers.

⇒ Further, the thrust of compliance ease should be on MSMEs, and in high employment elasticity sectors, including services, to move towards a $5 tn economy.

16. The contribution of coal based power generation is not expected to substantially go down in the next few decades, despite growing importance of renewables. Comment on the statement in light of increasing demand for power in India. **(250 words) 15**

नवीकरणीय संसाधनों के बढ़ते महत्व के बावजूद, कोयला आधारित विद्युत उत्पादन के योगदान में अगले कुछ दशकों में मूलतः कमी आने की उम्मीद नहीं है। भारत में विद्युत की बढ़ती मांग के आलोक में इस कथन पर टिप्पणी कीजिए।

India is facing energy poverty with 17% of global population, but also 6% of energy usage. (Economic Survey 2019)

To mitigate this, it is aimed to generate more renewable energy (175 GW - 2022) but coal remains important as:-

- More than 60% generation is coal based.
- Premature closure of coal plants will disrupt banks' balance sheets.
- Investment already made should be utilized till plant lifetime.
- Abundant coal availability, and new sources like Coal Bed Methane (CBM).
- Base load provided, due to intermittency of renewable energy.

- Increase in demand is estimated to be 2 times increase by 2030.
- commercial mining has been started- It will lead to efficiency and improved technology.
- It is one of the cheapest sources for 100% electrification.
- Clean Environment Fund contribution from coal production (₹400/Tonne).
- New technologies like Flue Gas Desulphurization (FGD), coal gasification etc.
- Paucity of storage of renewable energy.

⇒ Hence, coal and renewable energy are interdependent. Contribution of coal should be gradually reduced, and technology should be enhanced.

Further, need of hour is Coal Commission of India, to protect livelihood of coal belt, and alternate use of coal. Eg :

Non combustive usage (ammonia production, piped gas etc.)
[Dankuni coal complex supplies piped gas to Calcutta.]

17. Elaborate the strategic and operational elements of the Agriculture Export Policy, 2018 and discuss the role it can play to achieve the target of doubling farmers' income by 2022. **(250 words) 15**

कृषि निर्यात नीति, 2018 के रणनीतिक एवं परिचालन-संबंधी तत्वों का सविस्तार वर्णन कीजिए और 2022 तक किसानों की आय को दोगुना करने के लक्ष्य को प्राप्त करने में इसके द्वारा निभायी जा सकने वाली भूमिका की विवेचना कीजिए।

Agriculture Export policy aims at doubling exports from \$30Bn to \$60Bn by 2022, in line with Dalwai committee objectives.

This is essential as global share is only 2.2% currently!

- Strategic elements :-

• State government involvement : Infrastructure (warehouse; cold chain; clusters); nodal department.

• Logistics : To decrease time and cost, especially of perishable commodities.

• Infrastructure : Eg- Agriculture Export processing clusters.

- Operational elements :-

• Quality control : capacity building of assessors; awareness etc.

- Diversification
  - Destinations
  - Basket (Currently, 52% are rice, wheat and marine exports)
- Focus on value addition.
- Certification : Promotion of 'Brand India'
- Harness private sector investment in infrastructure creation.
- Economy of scale : Export clusters
- Thrust on R&D.

⇒ It will play the following $\boxed{\text{role}}$ in DFI-2022:-

- Decrease in pre- and post- harvest losses
- Private sector involvement will lead to increase in Contract Farming and Direct Marketing.
- Decrease market barriers, eg- phytosanitary barriers by focus on quality certification.

- Cut down losses of perishable horticultural commodities, with access to cold storage and warehousing.
- Increase in diversification of crops grown by farmer will mitigate price shocks.
- Thrust to agriculture sector with start up support under the policy.
- Greater bargaining power of farmers with private sector participation, outside APMC ambit.
- Greater incentive to improve quality and productivity for export market.

⇒ However, agri exports declined from $36 Bn (2011) to $31 Bn (2017). So, lacunae need to be fixed like - reluctance to model APMC act adoption, paucity of land records, antibiotic and chemical overuse etc.

Further, GM crop trials should be reinvigorated, for producing heat tolerant and nutritious varities.

18. Write a brief note on 'Dry Ports' and their significance in mitigating logistic challenges in India. Also, discuss the challenges in their development and measures needed to address them. **(250 words) 15**

भारत में लॉजिस्टिक्स की चुनौतियों को कम करने में 'शुष्क पत्तनों' एवं उनके महत्व पर एक संक्षिप्त टिप्पणी लिखिए। साथ ही, उनके विकास में आने वाली चुनौतियों और उनके समाधान हेतु आवश्यक उपायों पर चर्चा कीजिए।

'Dry port' is an Inland Container Depot (ICD) for temporary storage, and customs clearance of goods before shipment.

Eg : Largest ICD : Tughlaqabad, New Delhi

These are significant as there are 13 major and 187 minor ports, and thus play major role in 'Blue Economy'.

Multi-Modal connectivity ⇄ Dry port ⇄ Port → Export / ← Import

They $\boxed{\text{mitigate}}$ logistical challenge as :-

- Overcome cargo constraints at small ports.
- Less cost to exporter due to lesser idle time of ship.
- Significant as 70% of value and

95% by volume of exports via shipping route.

- Decrease in logistics cost from 14% of GDP.
- Revenue generation (eg - Container Corporation of India - CONCOR and CWC) → can be used in further decreasing logistics cost.
- This will lead to export competitiveness and increase in foreign trade.

Challenges in development :-

- Acquisition of land : Only large ICDs are economically viable.
- Investment : large funds for infrastructure required.
- Multiple dry ports : It has led to underutilization of capacity.
- Transportation : Congestion and lack of multimodal connectivity to dry ports.

Measures to address these are :-

- Harness PPP in dry ports.
- Connect expressways for ease of transportation.
- Convergence of industrial corridors with dry ports.
- Utilization index of each dry port - Improve facilities in profit making ones; consolidate smaller ones.
- Export Processing Clusters in vicinity of ICD will lead to better time and cost.

⇒ Further, there should be focus on especially the potential of North-East to export to East Asia and Southeast ~~via~~ due to abundant of viable land, inland waterways, ~~etc~~ and convergence with Act East policy and RCEP, in future.

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19. Development of food processing industry will help in achieving the twin goals of inclusive growth and food security. Discuss. Also, account for the competitive advantages enjoyed by India in the food processing sector.
(250 words) 15

खाद्य प्रसंस्करण उद्योग के विकास से समावेशी विकास और खाद्य सुरक्षा के दोहरे लक्ष्यों को प्राप्त करने में सहायता मिलेगी। चर्चा कीजिए। साथ ही, खाद्य प्रसंस्करण क्षेत्रक में भारत को प्राप्त प्रतिस्पर्धात्मक लाभ का भी विवरण दीजिए।

Food processing is a sunrise industry with CAGR of 17%. It has potential to double agriculture exports ($30Bn) and farmer income.

It will help in achieving inclusive growth and food security by:-

- Inclusive growth:-
  - → It can mitigate agrarian distress by diversification of crops, export income and decreasing wastage.
  - → Potential of employment and also forward and backward linkages (eg- transport, cold storage technicians etc.)
  - → Increase in exports will reap forex, which can be invested for social security schemes.

→ It will foster rural entrepreneurship.
→ Potential for greater employability and skill development of rural youth.
Eg: National Institute of Food Technology (Kundli)

- Food Security :-
→ Decrease perishment of fruits and vegetables.
→ Mitigate 'hidden hunger' by increasing intake of poultry and protein based products.
→ Lead to value addition and quality in food.
→ Decrease post harvest loss via cold storage and warehouses.

Competitive advantages enjoyed :-

- Highest livestock population (125 Cr) (19th Livestock census)
- Diversity of produce - crops | fruits | vegetables | poultry etc.
- 100% FDI allowed
- Included under PSL lending

} Funds

- Market < Domestic : Rising middle class
  International : Proximity to importers → Middle East and Africa
- Labourforce
  - 95 L enter workforce | year
  - Skill development focus (eg → agri polytechnics; National Institute of Food Technology etc.)
- Technology : eg: BIRAC's food irradiation to improve shelf life ; food fortification.
- Start ups : 2nd highest agri startups.
- Taxation : Zero GST on fruits and vegetables.

⇒ All these give an opportunity to make SAMPADA scheme and food parks a success.

20. Identify the problems faced by Indian agriculture as a consequence of changing land holding pattern as witnessed in the findings of Agriculture census, 2015-16. In light of these problems, suggest suitable ways to resolve such structural issues in agriculture. **(250 words) 15**

जैसा कि कृषि संगणना, 2015-16 के जाँच परिणामों में देखा गया है, परिवर्तनशील भू-धारण प्रतिरूप के परिणामस्वरूप भारतीय कृषि के समक्ष आने वाली समस्याओं की पहचान कीजिए। इन समस्याओं के प्रकाश में, कृषि में ऐसे संरचनात्मक मुद्दों का समाधान करने के लिए उपयुक्त उपायों का सुझाव दीजिए।

Land holding size has decreased from 1.15 Ha to 1.08 Ha on an average, and number of holdings has (2010-11) increased by twice in last 45 years.

It has led to following issues :-
- 67% farmers have land less than 1 Ha.
- Extension services become difficult.
- Mechanization is not cost effective on small plots.
- Technology infusion becomes lacking.
- Collateral also decreasing, leading to non-institutional loans and increase in indebtedness.
- It decreases bargaining power of farmer.
- It hinders diversification, agroforestry

and mixed farming.

- It creates impediment to contract farming and direct marketing due to small plot.
- Higher cost of inputs as it isn't an economy of scale.
- Vulnerability is further increased as 92% of Scheduled castes' holdings are small/marginal.

⇒ Ways to resolve such issues :-

- Thrust to cooperative farming, FPO and FPC to form economies of scale.
- Connect to online markets → eNAM and GrAM.
- Diversification under Operation Green
- Non farm rural employment to augment low farm income.
- Utilize MGNREGS data (Economic Survey 2019) to identify distress pockets of small landholdings to

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provide cheap credit.

Overall, a cross-sectoral approach to alleviate rural distress is required with thrust on non-farm employment, skill development of rural youth in agrobased industries and create a scheme of 'Aspirational Village programme' for convergence of all schemes.