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GENERAL STUDIES (TEST CODE : 1407)

Name of Candidate	SIDAQ SINGH	Registration Number	160702
Medium Eng./Hindi	ENGLISH	Date	6 Mar 2020
Center	02		

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
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3	10	
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16	15	
17	15	
18	15	
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20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

- 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)।
- There are **TWENTY** questions printed in **ENGLISH & HINDI** इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
- All questions are compulsory.** सभी प्रश्न अनिवार्य हैं।
- The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
- 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 than 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।
- Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
- 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.

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All the Best

1. Discuss the need and challenges of digitization of land records in India.

(150 words) 10

भारत में भू-अभिलेखों के डिजिटलीकरण की आवश्यकता और चुनौतियों की विवेचना कीजिए।

For efficient development and working of land markets, digitising land records is very important. It is needed because:

Need

- For growth is real estate sector, conclusive land titles is very important
- To promote contract farming, digitisation of land records is necessary
- To decrease land litigation, collating and digitising land records is required.
- To increase property tax and other revenue which is to be collected by local bodies, conclusive land titles is a necessity.
- Digitisation of land records ⇒ Conformity of land titles ⇒ Farmers would be able to take loan from banks by mortgaging their land.

However there are certain challenges too:

- ① Land titles in India are presumptive. So to digitise land records various administrative changes are needed
- ② Land records consist of survey maps, transaction details (sale deeds) and ownership records which are maintained by different departments.
- ③ Historically, land records were maintained manually, so difficult to digitise.

After launch of Digital India Land Record Management, digitisation of land records is taking place at a rapid pace and government is moving towards Conclusive Titling System

2. Give an account of the benefits that can accrue from the One Nation One Ration Card scheme. In this context, also discuss the challenges that need to be addressed for the scheme to become a success. **(150 words) 10**
- एक राष्ट्र एक राशन कार्ड योजना से प्राप्त हो सकने वाले लाभों का विवरण दीजिए। इस संदर्भ में, इस योजना के सफल होने के लिए जिन चुनौतियों का समाधान किए जाने की आवश्यकता है, उनकी भी विवेचना कीजिए।

Recently, The government came up with One Nation One Ration Card scheme under which a beneficiary would be able to get subsidised gains of his/her share in any state.

Benefits of scheme

- (i) It would immensely benefit the migrant workers who were earlier unable to get subsidised grains because of their migratory status.
- (ii) By linking with PDS, leakages would decrease.
- (iii) It would leave a data trail and would provide information about the extent of migration in India.
- (iv) It would facilitate productive workers.

to travel to different regions to get better employment.

Challenges associated with scheme

- (I) Technology failure as in case of Jharkhand etc would impede the beneficiaries to avail the benefit.
- (II) As per newspaper reports, various middlemen were misguiding migrant people to get the new ration card, in lieu of a charge.
- (III) The scheme doesn't address exclusion and inclusion errors.
- (IV) By linking to Aadhaar, many analysts believe, a certain part of deprived section gets left out of scheme.

The scheme is a step in right direction. State governments should ensure that technology act as a facilitator ^{at} & doesn't limit access to the scheme.

3. Identify the challenges faced by the railways in India. In this context, also discuss the ways in which the Railways can be transformed into an efficient public service provider as well as commercially viable entity.

(150 words) 10

भारत में रेलवे के समक्ष व्याप्त चुनौतियों की पहचान कीजिए। इस संदर्भ में, उन तरीकों की भी विवेचना कीजिए जिनके माध्यम से रेलवे को एक कुशल सार्वजनिक सेवा प्रदाता के साथ-साथ वाणिज्यिक रूप से व्यवहार्य निकाय के रूप में रूपांतरित किया जा सकता है।

Indian Railways has the fourth largest network in the world with route length of about 70,000 Km.

However it faces certain challenges:

- Challenges
- Over utilisation: More than 60% routes working at over 100% utilization rate.
 - Falling operating ratio (OR)
OR in 2017-18 was 98.4%.
(Worst ever since independence)
 - Decreasing share in modal mix w.r.t freight transport
1950-51 = 85%.
2016-17 = 33%.
 - Service delivery: dirty station, delay in train arrival and departure
 - Gap in investment: Lack of private participation
 - Safety: 75 accidents in 2017-18.

Following are ways to transform Indian railways:

- ① Complete Dedicated Freight Corridor (3360km) by Dec 2021: will increase railways share in freight from 33% to 45% and increase speed of goods train from 24km/hr to 75km/hr
- ② Increase participation of private sector in manufacture and maintenance of wagons and rolling stocks
- ③ Improving working of terminal stations which contribute 80% load
- ④ Advance signalling system with automatic train protection system should get installed by end of 2020.
- ⑤ Modernise railway stations to increase non-fare revenue

Rail Development Authority as announced in Feb 2018 should be formed at the earliest.

4. Agriculture marketing is a key driver of the agriculture sector in present times. In this context, discuss the role that the Integrated Scheme for Agriculture Marketing can play in strengthening agriculture marketing in India. (150 words) 10

वर्तमान समय में कृषि विपणन, कृषि क्षेत्रक का एक प्रमुख चालक है। इस संदर्भ में, भारत में कृषि विपणन के सुदृढीकरण में 'कृषि विपणन के लिए एकीकृत योजना' द्वारा निभाई जा सकने वाली भूमिका की विवेचना कीजिए।

According to Ashok Dalwai Committee due to flaws in agricultural marketing farmers get only 15% - 40% of the market price. So improving agricultural marketing is very important as it leads

to

- Improved price discovery
- Improved access to market for farmers
- will signal farmers about which crop should be sown.
- decrease number of intermediaries
- improved storage and warehousing facilities

To ensure this, Integrated scheme for agricultural marketing has been launched. It would lead to:

- ① Integration of value chain from

farmer to food processing company
to retailer

- (ii) Help farmer get remunerative price for his produce (Doubling Farmer Income by 2022)
- (iii) Improve storage infrastructure — cold storage, reefer vans etc, by promoting private sector investment
- (iv) It would promote rural development as private sector would invest in food processing infrastructure in rural areas.

The states have a key role to play as should make necessary modifications in APMC Acts to ensure establishment of an integrated value chain.

5. Highlighting the need for Participatory Irrigation Management (PIM) in India, discuss the constraints in implementing PIM. (150 words) 10

भारत में सहभागी सिंचाई प्रबंधन (PIM) की आवश्यकता को रेखांकित करते हुए, PIM के कार्यान्वयन में आने वाली बाधाओं की विवेचना कीजिए।

India is a water stressed nation with per capita water availability of $1450 \text{ m}^3/\text{yr}$. As a result participatory irrigation management (PIM) is the need of the hour as agricultural consumes 85% of water in India.

Need of PIM

→ It would lead to better management of groundwater aquifer

→ PIM would make local people stakeholders in water management. This would promote rainwater harvesting

→ It would improve water use efficiency as community participation would lead to upcoming of innovative solutions

→ will enhance social capital

and would indirectly promote FPOs
and co-operative farming.

However there are certain Constraints
in implementing PIM:

- (i) Local bodies do not have sufficient resources to manage an aquifer
- (ii) ~~Technical~~ Technical experts which could guide PIM at local level are not present in rural areas
- (iii) PIM might result in domination of large farmers over small and marginal farmers.
- (iv) State governments are reluctant to follow this model.

Atal Bhujal Yojna - a scheme in 7 states with World Bank assistance is the step in right direction.

6. Despite being cost effective and efficient, (why) does water transport continue to be an underutilized mode of freight transport in India? What steps have been taken by the government in this regard? **(150 words) 10**

लागत प्रभावी और कुशल होने के बावजूद, भारत में जल परिवहन माल दुलाई का अल्प प्रयुक्त साधन क्यों बना हुआ है? इस संबंध में सरकार द्वारा क्या कदम उठाए गए हैं?

Despite cost of water transport being ₹ 0.3 / Km-Tn as compared to road transport of ₹ 3 / Km-Tn, water transport contributes just 6.5% in total freight transport in India.

Reasons for this are:

- Reasons
- Inadequate draft depth of rivers and canals decreases utility of inland waterways
 - Weak connectivity with road and rail to water terminal stations
 - Load handling at terminals is poor and costly
 - Lack of feeder canals that provide connectivity.
 - Capital to promote infrastructure of water transport is costly.

Steps taken by government to improve contribution of water transport

- ① SAGAR MALA project would improve port connectivity and development
- ② 106 new National Waterways got announced in addition to existing 5 Nws.
- ③ 2.5% fund out of Central Road Fund would be used for development of inland waterways.
- ④ 34 multimodal logistics parks that got announced in 2017 will give a boost to water transport in India.

By giving capital subsidy to development of water transport infrastructure, government can give a boost to this sector.

7. Highlight the factors that constrain the growth of logistics sector in India. What can be done to remove these constraints? (150 words) 10
भारत में लॉजिस्टिक्स क्षेत्र के विकास को बाधित करने वाले कारकों को रेखांकित कीजिए। इन बाधाओं को दूर करने के लिए क्या किया जा सकता है?

Logistics sector caters consists of services that lead to transfer of goods from manufacturer to consumer. There are certain factors that limit growth of this sector

→ High cost: logistics contribute 14% to India's GDP (US = 9%).

→ Inefficient multimodal misc. Road transport being most expensive contributes 56% in ~~less~~ freight transport in India.

→ logistics sector consists of 4 components transport, warehousing, freight forwarding and value addition services. All are regulated by different regulators.

→ Warehousing sector hardly contributes to value addition. In most of cases still manual loading unloading takes place.

Following steps should be taken to remove these constraints:

- ① Dedicated Freight Corridor and port development under Sagarmala should be expedited.
- ② 34 Multimodal Logistics Parks announced in 2017 should get completed before 2022-23.
- ③ Trans-shipment ports at Vizhinham and Ennore should be complemented at earliest.
- ④ Integration across different modes using common IT platform would help save time.

Government's decision to give infrastructure status to logistics sector would help promote growth of this sector.

8. The recent Union Budget has proposed corporatizing at least one major port. In this context, highlight the benefits of a corporatized port, as compared to ports run by public authorities. **(150 words) 10**

हाल ही के केंद्रीय बजट में कम से कम एक प्रमुख पत्तन के निगमीकरण का प्रस्ताव रखा गया है। इस संदर्भ में, सार्वजनिक प्राधिकरणों द्वारा संचालित पत्तनों की तुलना में, निगमीकृत पत्तन के लाभों पर प्रकाश डालिए।

As per NITI Aayog - Strategy for New India @ 75, port capacity in India is 2.1 bn Tn which needs to be upgraded to 2.5 bn Tn by 2022-23. To improve efficiency of port sector, government recently announced corporatising at least one major port.

Benefits of a corporatised port over ports run by public authorities

- ① Improvement in terminal efficiency by improving document clearance time etc (For imports, document clearance time in India in 2019 was 20 hours as compared to 9 hours in China)

- ② Corporatising would increase involvement of private sector in dredging operations - would help increase draft depth to 18 meters.
- ③ Corporatising would help attract investment that would help in port modernisation and development.
- ④ Corporatisation would help Indian port to install transshipment terminals like Chennai (ICCT) terminal which would help decrease logistics cost.
- ⑤ Corporatisation would help improve connectivity by better co-operation with Indian railways to get access to hinterland.

Corporatisation of ports would decrease logistics cost in long run which would give a boost to Indian exports.

9. Bring out the rationale behind government promoting smart metering in India. Mention some of the steps that have been taken by the government in this regard. (150 words) 10

भारत में सरकार द्वारा स्मार्ट मीटरिंग को बढ़ावा देने के पीछे निहित तर्क को स्पष्ट कीजिए। इस संबंध में सरकार द्वारा उठाए गए कुछ कदमों का उल्लेख कीजिए।

NITI Aayog in its 3 Year Action

Agenda emphasised on need of Smart Metering to make the power sector of India robust.

Rationale behind promoting smart metering in India

① It would decrease AT&C (Aggregate Technical & Commercial) losses in India which presently stand at 21.5%.

② It would promote retail producers of electricity to feed power into the system.

③ It would improve recovery for DISCOMs. Improvement of health of DISCOMs would improve Plant Load Factor of thermal power plants. → Presently 61%.

④ It would also promote production of renewable energy like solar energy etc, which in excess ~~we~~ could be bought by DISCOMS.

Steps taken by government in this regard

① The government is ~~coming~~ coming up with PPP models like IBDF Model (Input Based Distribution Franchise)

to promote Smart Metering.

② Through incentives under UDAY scheme, central government is promoting smart metering.

③ Through IPDS (Integrated Power Development Scheme), government is targetting to decrease AT&C losses through smart metering.

Hence smart metering would make Indian power sector more effective in distribution of energy.

10. Discuss why land pooling is being seen as an effective and dependable tool that can replace the traditional land acquisition mechanism.

(150 words) 10

चर्चा कीजिए कि क्यों लैंड पूलिंग को पारंपरिक भूमि अधिग्रहण तंत्र को प्रतिस्थापित कर सकने वाले एक प्रभावी और विश्वसनीय साधन के रूप में देखा जा रहा है।

Land pooling refers to aggregating different land units for specific purposes, without transferring ownership, for a certain period of time.

It is an effective tool that can replace traditional land acquisition mechanism as:

- ① The security of land title is ensured, so the person who owns the land doesn't lose control over his/her land.
- ② Meets developmental needs while ensuring ownership is not transferred.
- ③ Converts land from unproductive to productive purposes.
- ④ The original owner of land gets income in exchange of use of his land for development needs.

⑤ It decreases instances of litigation w.r.t compensation for land acquisition.

To ensure success of land pooling, tenancy laws of states needs to be altered. Model Land Leasing Act, 2016

is a set up right direction. States should alter their lands as per provision of this act which promotes land pooling.

11. Examine the need of a new integrated energy policy to achieve the goal of energy self-sufficiency without compromising the ecology of the country.

(250 words) 15

देश की पारिस्थितिकी से समझौता किए बिना ऊर्जा आत्मनिर्भरता का लक्ष्य प्राप्त करने हेतु एक नई एकीकृत ऊर्जा नीति की आवश्यकता का परीक्षण कीजिए।

The peak load deficit in 2018-19 stood at 0.8%. Out of total generating capacity (2/3 rd) 64% is contributed by thermal power plants which are very polluting.

So ensure the goal of energy sufficiency and adhering to Paris Summit commitments, India needs a new integrated energy policy. It would focus on:

- ① Improving the plant load factor of thermal power plants as it would improve capacity utilisation. (In 2017, there was energy deficit, despite installed capacity being 330 Gw and peak demand = 165 Gw)

② It would help better integration of renewable energy sources like solar energy, wind energy etc into the energy mix, ~~do~~ thus decreasing carbon footprint.

③ By end of 2018, renewable energy contributed 75 Gw in total capacity. The integrated energy policy through proper incentives would help to scale it to 175 Gw by 2022.

④ The new energy policy would help improve health of discoms through innovative models involving private participation which would

- ↳ Improve distribution infrastructure
 - ↳ Increase energy demand from generating stations,
- thus achieving goal of energy self

sufficiency.

- ⑤ It would set the pathway to help decrease contribution of polluting sources of energy and increase contribution of renewable sources which presently contribute just 21% of generation capacity (as compared to greater than 65% in case of Canada & Brasil)

The new integrated energy policy would help India meet its growing energy demand which is expected to triple by 2040 while ensuring that large proportion of increasing capacity is met by renewables.

12. The cropping pattern in India is highly skewed towards crops that are water-intensive. In this context, discuss the need to shift the focus from land productivity to irrigation water productivity. (250 words) 15

भारत में शस्य प्रारूप जल-गहन फसलों की ओर अत्यधिक झुका हुआ है। इस संदर्भ में, भू उत्पादकता से सिंचाई जल उत्पादकता पर ध्यान-केंद्रण की आवश्यकता पर चर्चा कीजिए।

Cropping pattern in India being skewed towards water intensive crops can be judged from following

Growing of paddy in water scarce regions of Punjab, Haryana and western UP

Sugarcane cultivation in drought hit Marathwada region of Maharashtra

2 prominent reasons for this are

- ① MSP regime of India
- ② Presence of agricultural marketing system that promotes growth of water intensive crops.

However there is an urgent need to shift from land production to irrigation water productivity because

- ① Growing number of black spots

in Punjab and Haryana due to drastic fall in water table due to growing of water intensive crops

(II) Salt salinisation : Due to excess irrigation, soil in Punjab and Haryana has become saline.

(III) It would lead to better land utilisation. Eg: as per NABARD, rice productivity in Punjab is $0.3 \text{ Kg} / \text{m}^3$ of water where in Jharkhand, it is $0.7 \text{ Kg} / \text{m}^3$

(IV) It would make agriculture sustainable. The land in Punjab, Haryana, western UP is suitable for growing crops like maize, soyabean, basmati etc which have a large export potential.

(V) It would help counter the prevailing water stress. (Per capita water availability in India is merely $1450 \text{ m}^3 / \text{yr}$)

(vi) As stated by M.S Swaminathan, it would help usher in Evergreen revolution as it would promote soil health, ecology and farmer.

To promote this shift, role of government is very important as it would have to alter its MSP regime, procurement matter, incentivise production of dry crops like maize etc and provide extension support to farmers.

PM-ASHA is a step in right direction

13. While animal husbandry plays a significant role in food security, supplementing family incomes and generating gainful employment in the rural sector, it is beset with a number of challenges. Discuss.

(250 words) 15

यद्यपि पशुपालन खाद्य सुरक्षा, पारिवारिक आय के अनुपूरण और ग्रामीण क्षेत्र में लाभकारी रोजगार सृजित करने में महत्वपूर्ण भूमिका निभाता है, तथापि यह कई चुनौतियों से ग्रसित है। चर्चा कीजिए।

As per the Livestock Census, 2019, India has the largest population of livestock at 53.5 crore. As a result animal husbandary plays significant role in India.

→ Food Security: Eg India has about 12.5 cr milch animals which produce 17.5 cr Tn of milk

→ Supplement Family incomes as animal husbandary contributes a significant share in total agricultural income

→ Generate gainful employment - about 15 crore farmers are employed in animal husbandary

However animal husbandary faces

a number of challenges:

- (I) Productivity: Milk production per ^{animal} in case of cattle and buffalo in India is low as compared to other nations.
- (II) Shortage of fodder - expected to be around 56% by 2025.
- (III) Veterinary doctors in India are less due to which livestock faces various diseases.
- (IV) Quality issues due to domination of unorganised sector (to the tune of 85%.) in livestock.
- (V) Export market: Countries like South Korea, Thailand etc character India ~~as~~ as ridden with Foot and Mouth Disease (FMD), besides this various quality restrictions are

also placed on India's dairy industry

- (vi) Increasing pressure on India to open its dairy sector in various regional trade negotiations (RCEP), FTAs etc.

To improve this sector, government has taken various initiatives like GOKUL mission (improving breed, herd composition), National Bovine Mission etc.

14. Highlighting the problems faced by the food processing sector in India, elaborate on the approach adopted by the government under the Pradhan Mantri Kisan SAMPADA Yojana to address the same. (250 words) 15

भारत में खाद्य प्रसंस्करण क्षेत्रक द्वारा सामना की जाने वाली समस्याओं पर प्रकाश डालते हुए, उन्हें दूर करने के लिए प्रधानमंत्री किसान संपदा योजना के अंतर्गत सरकार द्वारा अपनाए गए दृष्टिकोण का सविस्तार वर्णन कीजिए।

→ (FP)
Food Processing Sector is the a sunrise sector and is very important for food security and improving farm income. However it faces certain problems:

→ Institutional issues: APMCs restrict access of FP companies to farmers

→ Infrastructural issues: access to rural areas through roads, railways is weak

+
lack of soft reefer vans / refrigerated vans to the tune of 85% of requirement

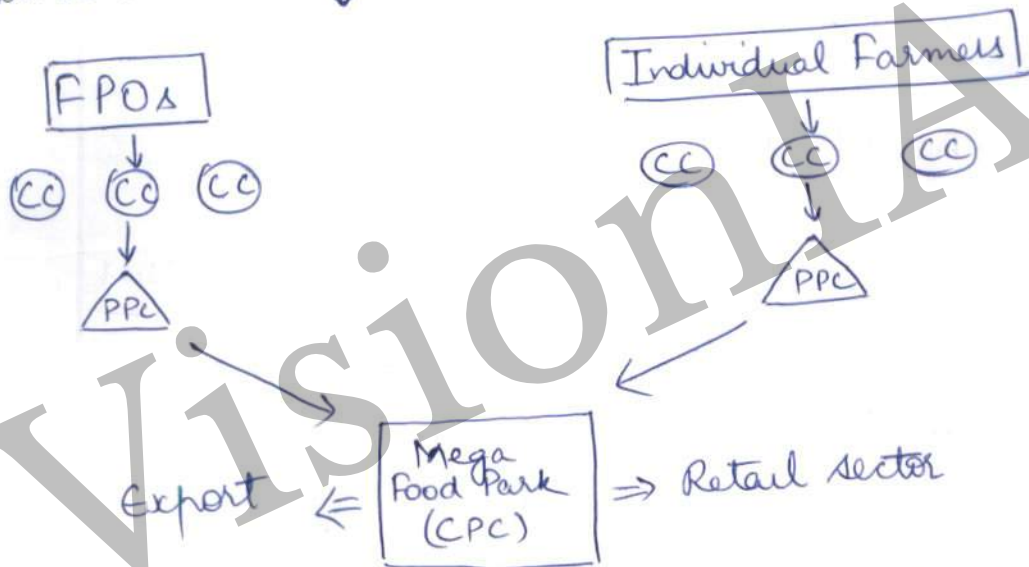
→ Issues with respect to land clearances by state governments to establish FP industries

Problems

→ Issue with respect to access to capital to set up processing units

→ Restrictions on stockholding under Essential Commodities Act

To counter these issues, government launched PM SAMPADA Yojna. Approach under this scheme



① It would set up Collection Centres (CC) and Primary Processing Centres (PPC) as spokes and Central Processing Centre (CPC) as hub.

② It would incentivise construction of warehousing and cold storage facilities and transport

- ③ It would promote setting up Quality testing labs, grading facilities, pre cooling facilities, packing housing, irradiation facilities etc.
- ④ It would also involve programme to skill workers to contribute in food processing industry.

So SAMPADA scheme aims to create an integrated value chain that would connect farmers, processors and retailers, along with strengthening backward and forward linkages.

15. The government should prioritize capital investments over subsidies to improve the economic situation of farmers. Discuss. (250 words) 15
सरकार को किसानों की आर्थिक स्थिति में सुधार करने के लिए सब्सिडी की तुलना में पूंजी निवेश को प्राथमिकता देनी चाहिए। चर्चा कीजिए।

The government provides various subsidies to farmers in form of fertilizer subsidy, capital subsidy, fuel subsidy etc (besides loan waivers)

However such subsidies do not address structural problems of Indian agriculture. Solving these structural problems requires capital investment. This could be understood by:

- ① Irrigation: Of the total cropped area, only 35% area is irrigated. According to estimates had loan waiver amount which amounted to ₹ 3 lakh crore cumulatively in 2016-17 been invested in irrigation, area under irrigation would have increased to 75%.

- ② Marketing infrastructure : Investment in warehousing facilities, cold storage, refriger vans, quality labs, packaging infrastructure, irradiation facilities etc at APMCs would help farmers get much better price for their produce
- ③ Investment in R&D would help increase quality of seeds (eg. introducing nitrogen use efficiency genes in seeds would decrease requirement of fertilizers and decrease input cost)
- ④ Investment in agricultural extension services + Agri Clinics + Kisan Vikas Kendras etc would improve farm productivity and bridge information gap.

⑤ Investing to improve processing facilities in rural areas under SAMPADA scheme would integrate farmers in value chain and would enable him to reap better price for food.

⑥ Investment would help improve livestock sector also. Eg GOKUL Mission

So capital investment in agriculture unlike subsidies which have short term impact, would help achieve the goal of doubling farmer income by 2022.

16. The efficacy of other agricultural inputs in enhancing agricultural production is largely determined by the quality of seed. In this context, what are the concerns faced by farmers in India? Also, identify the interventions required to address these concerns. **(250 words) 15**

कृषि उत्पादन बढ़ाने में अन्य कृषि आदानों की प्रभावकारिता मुख्य रूप से बीज की गुणवत्ता से निर्धारित होती है। इस संदर्भ में, भारत में किसानों को किन चिंताओं का सामना करना पड़ रहा है? साथ ही, इन चिंताओं को दूर करने के लिए आवश्यक हस्तक्षेपों की पहचान कीजिए।

It was the High Yielding Variety (HYV) seeds that ushered in green revolution in India. So quality seeds is one of the most important factors that ~~determine~~ determines agricultural produce.

However farmers of India face certain concerns with respect to quality of seeds used:

- ① Seed Replacement rate is very less. Most of the farmer are using farm saved seeds, due to high price of breeder seeds.
- ② Domination of MNCs like Monsanto (Bt Cotton) which has increased the

price of seeds

- ③ Decreasing efficacy of seeds : Eg:
pest attack on cotton in Punjab (grown
using Bt Cotton seeds)
- ④ Less investment in R&D to improve
seed quality . Eg: improving seeds
through introducing genes that
increase nitrogen use efficiency.
- ⑤ Ban by government on certain
seeds like GM Mustard, Ht Cotton
etc.
- ⑥ Violation of Intellectual
property rights : Eg:
Farmers in Maharashtra sued by a
seed company.

Following interventions are required
to address these concerns:

- ① Increasing investment in R&D :
Eg PAU's rice variety that uses
less water.
- ② ~~Pre~~ Providing seeds at subsidised

rates to improve seed replacement rate.

- ③ Providing support to seed industries to decrease monopoly of MNCs
- ④ Relooking into the decision to stop introduction of GM seeds for food crops

By improving the quality of seeds and providing access to quality seeds, farm productivity in India would improve.

17. Throwing some light on the Indian agricultural trade scenario, give an account of both supply-side and demand-side issues hampering India's agricultural export competitiveness. (250 words) 15

भारतीय कृषि व्यापार परिदृश्य पर संक्षिप्त रूप से प्रकाश डालते हुए, भारत की कृषि निर्यात प्रतिस्पर्धात्मकता को बाधित करने वाले आपूर्ति-पक्ष और मांग-पक्ष संबंधी मुद्दों का विवरण प्रस्तुत कीजिए।

Agricultural trade in India is largely regulated because of issue of food security and large section (49%) of population dependant on it for livelihood

Indian Agricultural trade scenario

- ① Agricultural trade largely takes place through APMCs which are marked by inefficiencies and cartelization of traders
- ② Private trade in agriculture is very less because government buys 75% of marketable surplus
- ③ Export of agricultural commodities take place to the tune of \$30 bn (which is about 2% of world's agricult)

tural trade)

India's export competitiveness is hampered because of:

①

Supply Side
Issues

- Cost of production in India is high because of small landholdings and less mechanisations
- Large proportion of surplus being taken up by government
- Restrictions on selling produce to private traders directly
- High levies like Mandi fee, comr warehousing levies etc being charged in APMCs
- Non development of FPOs
- Nascent food processing sector.

② Demand side issues

- Stockholding limits under Essential Commodities Act (ECA)

- Lack of capital to set up food processing units in rural areas
- Issue in land clearances for food processing units by states
- Export limits on agricultural commodities by government along with Minimum Export Price.

The government came up with Export Policy for Agriculture in 2018 which aims to double exports from \$30 bn in 2017-18 to \$60 bn by 2022-23 by improving policy environment and supporting infrastructure development.

18. National Infrastructure Pipeline is an ambitious step in the direction of achieving multiple development goals. In this context, discuss its features and significance. **(250 words) 15**

राष्ट्रीय अवसंरचना पाइपलाइन विविध विकास लक्ष्यों को प्राप्त करने की दिशा में एक महत्वाकांक्षी कदम है। इस संदर्भ में, इसकी विशेषताओं और महत्व की विवेचना कीजिए।

NIP National Infrastructure Pipeline

sets the roadmap for investment in infrastructure for period from FY2020 to FY2025

Features of NIP

- ① A total of ₹102 lakh crore would be spent on infrastructure in this period.
- ② Both central and state government would contribute 39% each with private sector contribution at 22%.
- ③ Investment in Energy sector = 24%, Road sector = 19%, Housing = 16%, Railway = 13%. These four make up 70% of total investment.

- ④ The government will review progress periodically and can alter the projects as per requirement and priority.

Significance of NIP

- ① It would make the economy more competitive (Improve rank in WEF's Global Competitiveness Index)
- ② Decrease logistics cost as a percentage of GDP (presently 14.1%, US = 9%)
- ③ Would improve ease of living.
Eg - large investment in housing sector.
- ④ It would increase Gross Fixed Capital formation (GFCF) as a percentage of GDP which stands at mere 28.5% (in 2017-18)
- ⑤ It would create employment in

the economy.

- ⑥ It would give a boost to farm sector by improving overall transportation and storage infrastructure

To ensure success of NIP, improving regulatory environment w.r.t

land, environmental clearances etc is very important. Besides this,

improving banking sector along with developing bond market is important to meet the investment needs.

19. Increasing the supply of urban land should be a priority area if India is to achieve faster urbanization. Discuss. Also, suggest some measures in this regard. **(250 words) 15**

यदि भारत को अपेक्षाकृत तीव्र शहरीकरण प्राप्त करना है तो शहरी भूमि की आपूर्ति बढ़ाना प्राथमिकता वाला क्षेत्र होना चाहिए। चर्चा कीजिए। साथ ही, इस संबंध में कुछ उपायों का भी सुझाव दीजिए।

Urban areas are considered ~~the~~ the engines of growth in an ~~economy~~ economy. In India they contribute about 70% of GDP.

To achieve faster urbanisation, increasing supply of urban land should be priority as:

① Housing needs: More and more people are moving towards urban areas. So providing land for housing is very important (PM Awaas Yojna - Target of building 1.2 cr houses in urban areas)

② land for industrial development: Supply of land to ~~ens~~ set up industrial clusters which would boost economy.

- (ii) Transportation requirement would need land for building roads, railway tracks, enlarging airports etc.
- (iv) Power projects would require land for setting up generating infrastructure and transmission network
- (v) land for managing waste resources

Measures to increase supply of urban lands.

- (i) Digitisation of land records would help improve land utilisation in urban areas.
- (ii) Setting up land Development Banks which would divert land from unproductive to productive proposes.
- (iii) Vertical land usage should be promoted through better engineering skills.

- ④ Land Data Repository should be created at state level to improve land provisioning using GPS.
- ⑤ Land Acquisition Act should be streamlined to promote land acquisition for infrastructure projects while simultaneously ~~improving~~ ensuring rehabilitation.

Land is under state list. So states should take steps and prepare policy for urban land use which would help meet the needs of growing urbanisation.

20. Bring out the need for organizing farmers into structures like producer organizations. Also, identify the challenges that need to be addressed for such initiatives to achieve their desired objectives. (250 words) 15

उत्पादक संगठनों जैसी संरचनाओं में किसानों को संगठित करने की आवश्यकता को रेखांकित कीजिए। साथ ही, ऐसी पहलों के वांछित उद्देश्यों को प्राप्त करने के लिए उन चुनौतियों की पहचान कीजिए जिन्हें दूर किए जाने की आवश्यकता है।

Farmer Producer Organisations are companies in which farmers would aggregate to reap the benefits of economies of scale.

Need of organising farmers into FPOs

- ① It would improve bargaining power of farmers w.r.t

↳ Buying inputs
↳ Selling produce

- ② It would enable farmers get collective access to various information services, extension services, knowledge about new technologies etc

- ③ FPOs can indulge into value addition activities like by setting up processing facilities etc

- ④ Food processing companies would find it easier to trade with FPOs as it would decrease their operational cost to transact with separate farmers
- ⑤ FPOs get easier access to credit
- ⑥ FPOs get ^{access to} management expertise through technical experts

Challenges w.r.t FPOs

- ① Due to unconnected land holdings, ^{banks} ~~farmers~~ usually do not lend to FPOs
- ② Technical experts are not present in rural areas.
- ③ SFAC / Small Farmers Agri Business Consortium provides guarantee to financial institutions for FPOs only if they have > 500 members
- ④ FPOs which are present in unconnected / ~~poorly~~ poorly connected rural areas face challenges in marketing

their produce.

- ⑤ Most of farmers in FPOs are poor, ^{→ Small & Marginal} so even collectively, they are unable to contribute much, so as to pull food processing units towards them.

The government is taking a lot of steps to promote FPOs like SAMPADA

Yojna, TOPs Scheme. In Budget

2018-19, government have 5yr tax

holiday to FPOs with turnover less

than ₹ 100 cr.