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GENERAL STUDIES (TEST CODE : 1060)

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Medium Eng./Hindi	English	Registration Number	97460
Center	ORM	Date	20-08-2018

Economy II

INDEX TABLE		
Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
6	10	
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8	10	
9	10	
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11	15	
12	15	
13	15	
14	15	
15	15	
16	15	
17	15	
18	15	
19	15	
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.

All the Best

1. Discuss the prospects & challenges in adopting an integrated multimodal transportation system in India with reference to government initiatives in this regard. (150 words) 10

भारत में एकीकृत मल्टीमॉडल परिवहन प्रणाली के संबंध में सरकार की पहलों को संदर्भित करते हुए इसे अपनाने से संबंधित संभावनाओं एवं चुनौतियों पर चर्चा कीजिए।

Prospects of Integrated multimodal transportation -

- ① ease in logistics movement
- ② Increase in export
- ③ Unified market economy
- ④ Integration across all states
- ⑤ Boost to manufacturing MSME in export & import of inputs.
- ⑥ Boost to agricultural export → reduction in wastages.
- ⑦ Service delivery improvement → Reduction in turn around time.
- ⑧ from ports to industries seamless movement of goods.

Challenges

- ① Multiple ministries and departments

in transport sector

- ② lack of inland waterways → slow development of National waterways
- only 6 National waterways functional
- water availability less → only seasonal transport.
- ③ lack of coastal road network, dry ports and deep draft port
- ④ ~~lack~~ No free movement of between coastal & inland shipping
- ⑤ Railway network not efficient → delay of freight.

govt Initiatives

- ① Dedicated freight corridors.
- ② Jal Vikas Pariyojana → multi nodal ports for seamless transfer of goods.
- ③ Bharatmala Pariyojana →
 - ① Highways
 - ② Coastal Roads
 - ③ Industrial corridors.

2. Contract farming can help in the expansion of organized food processing industry in India by strengthening backward linkages. Comment. What changes are required in the existing regulatory structure to address issues related to contract farming in India? (150 words) 10

अनुबंध कृषि (कॉन्ट्रैक्ट फार्मिंग) बैकवर्ड लिंकेज को सुदृढ़ कर भारत में संगठित खाद्य प्रसंस्करण उद्योग के विस्तार में सहायता कर सकती है। टिप्पणी कीजिए। भारत में अनुबंध कृषि से संबंधित समस्याओं को हल करने हेतु वर्तमान नियामक संरचना में क्या परिवर्तन आवश्यक हैं?

One of the biggest obstacle of Private ~~indian~~ sector entering into food processing business in India is lack of assured supply at reasonable and uniform price.

How contract farming can help →

- ① Strengthen backward linkage
- ② Removal of middle men & middle interference
- ③ Allow predetermined price negotiation
- ④ ~~and~~ Assurance of supply of agreed quantity & quality
- ⑤ security of farmers income
- ⑥ Industry can help provide inputs & guidance & required technology for desired quality product.
- ⑦ Industry can provide transport.

Required changes →

- ① Agriculture : State subject
- ② All States should enact model contract farming bill released by NITI Aayog
- ③ exempt products produced under contract farming from mandatory criteria of selling into MANDI → amendment of APMC Act.
- ④ Allow Farmers Producer organisations to function without political interference and enable them to engage in contract farming.
- ⑤ ~~exempt~~

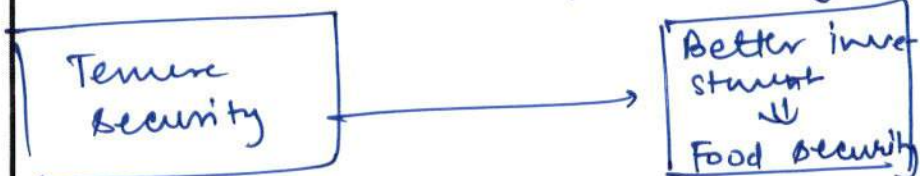
3. In view of the direct link between tenure security and food security, there is need for a conducive legal framework for land rights in India. Discuss.

(150 words) 10

पट्टे की सुरक्षा और खाद्य सुरक्षा के बीच प्रत्यक्ष संबंध को ध्यान में रखते हुए, भारत में भूमि अधिकारों के लिए एक हितकर कानूनी ढांचे की आवश्यकता है। चर्चा कीजिए।

Link between land tenure security & Food security -

- ① Fear of losing land rights → owners keep land unused rather than leasing it → Reduced utilization
- ② Fear of eviction → tenant don't invest in improving productivity
- ③ existing tenancy acts require owner to release certain amount of land upon resumption in favour of tenant
~~⇒ NO~~
- ④ Informal leasing ⇒ NO access to credit and insurance ⇒ NO quality inputs : seeds & irrigation & ~~for~~ Hence low productivity.



Need for conducive legal framework

- ① To enable land owners to lease land without fear of losing and allowing more farm to non-farm movement.
- ② Small & marginal & tenant farmer can get formal credit & insurance.
- ③ Leasing can allow pooling of land and improve productivity by economies of scale : i.e. mechanisation, micro irrigation
- ④ ~~For~~ Tenant can get his utilised investment in soil improvement back as a matter of right, upon resumption.

In light of above arguments, land tenancy act should be enacted in all states with uniform provision.

4. The ultimate goal of farm loan waivers is to lessen the debt burden of distressed and vulnerable farmers and help them qualify for fresh loans. However, this practise suffers from several drawbacks. Discuss.

(150 words) 10

कृषि ऋण माफ़ी का अंतिम लक्ष्य संकटग्रस्त और सुभेद्य किसानों का ऋण बोझ कम करना और उन्हें नए ऋणों के लिए अर्ह बनाने में सहायता प्रदान करना है। हालांकि, यह चलन कई कमियों से ग्रस्त है। चर्चा कीजिए।

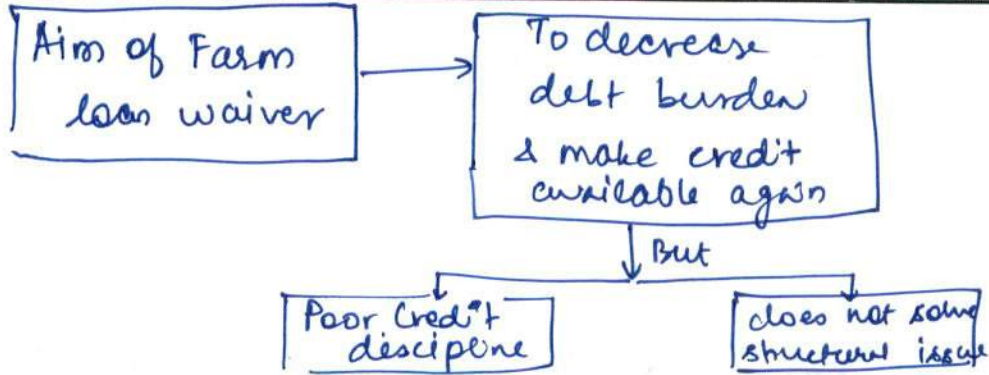
Aim of Farm loans →

Improve productivity
& Income

But structural issues in agriculture lead to inadequate ~~the~~ returns and hence farmers are unable to pay back loans.

Issue of Agriculture resulting in high debt burden

- ① Monsoon dependence → due to climate change drought & floods have increased
⇒ loss of crops ⇒ No return on investment
↓
debt burden
- ② Soil fertility has declined due to excess water use (flood irrigation) & fertilizer overuse → productivity has declined.
- ③ Lack of quality seeds, insurance penetration, R&D, extension & mechanised farming.



Drawback of Farm loan waiver

- ① Tool of political campaigning.
- ② No long term vision to resolve debt burden. → A Piecemeal approach
- ③ Promotes poor credit discipline → discourages even affluent farmers from paying loans.
- ④ Once in every 5 years. In between farmers commit suicide, and are exploited.
- ⑤ No regard for banks health → Banks discouraged from making more loans.
- ⑥ Farm loan waivers increases fiscal deficit but against this expenditure no capital asset created → loss to economy

5. Minimum Support Price (MSP) of crops is a short term solution for agricultural distress which creates long term problems. Examine. Suggest measures to overcome the the limitations of the MSP regime.

(150 words) 10

फसलों के लिए न्यूनतम समर्थन मूल्य (MSP) कृषि संकट का एक अल्पकालिक समाधान है जो दीर्घकालीन समस्याएं पैदा करता है। परीक्षण कीजिए। MSP व्यवस्था की कमियों से निजात पाने हेतु उपाय सुझाइए।

Aim of minimum support Price

- ① Assured income to farmer
- ② To meet food security ^{need} of India
- ③ To promote investment in quality high yielding variety and fertilizer use.
- ④ To promote investment in irrigation to boost productivity

Long term problems

- ① Monocropping of only those crops which are in MSP basket
- ② Water intensive crops → sugarcane, rice etc. ⇒ ① groundwater use increases
② Replaced local crops such as pulses, millets
- ③ Overuse of fertilizers & pesticides.
- ④ loss in soil fertility.
- ⑤ Regional imbalances in procurement.
- ⑥ MSP benefit only to large farmers, not

to small & marginal farmers.

- ⑦ Dual market → ① open market system
② MSP.

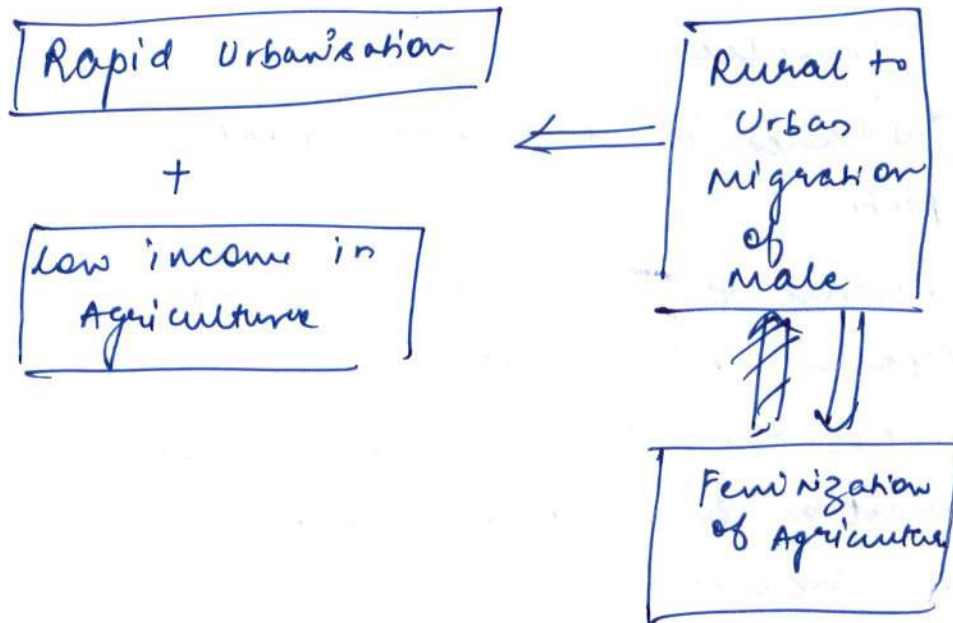
Required Reforms

- ① Price deficiency payment on model of Bhavantar Bhugtan Yojana in MP
- ② Direct Benefit transfer of MSP to farmers.
- ③ Include more crops in MSP regime and increase choices for farmers.
- ④ Instead of One size fit all approach i.e. one MSP basket for ~~all~~ India, Include crops as per local needs, climate ~~and~~ that suits the soil quality of different state.
- ⑤ legislative reforms in APMC Act, enact contract farming act to enable farmers to increase income.
- ⑥ Focus on allied sector

6. With women playing an increasingly significant role in the Indian agriculture sector, gender specific interventions can be the key to improving agricultural productivity. Discuss. (150 words) 10

भारतीय कृषि क्षेत्र में महिलाओं की बढ़ती भूमिका को ध्यान में रखते हुए, कृषि उत्पादकता में सुधार लाने के लिए लिंग विशिष्ट हस्तक्षेप महत्वपूर्ण हो सकते हैं। चर्चा कीजिए।

~~With increasing urbanisation.~~



Though feminization of agriculture is increasing, women ownership of agricultural land is meagre which leads to insecurity and increases their vulnerability.

Why Gender specific interventions are required →

- ① To improve skill of women to increase mechanisation ∴

- ② To enable them to access formal credit & insurance. (Free them of moneylenders.)
- ③ Extension services that cater to females.
- ④ Guidance in quantity, quality of inputs.
- ⑤ decrease their vulnerability to disaster and climate change
- ⑥ Increase their bargaining power and connection to markets and increase their income

govt efforts

- ① self help groups under National Rural Livelihood Mission
- ② Extension services (NMAET)
- ③ Pradhan mantri Fasal Bima Yojana
- ④ Kisan credit card
- ⑤ GRAMS → Rural haats.
- ⑥ FPOs.

7. Enumerating the factors that determine a nation's energy-mix, comment on the need for having a diversified fuel basket for meeting India's future energy demands. (150 words) 10

किसी राष्ट्र के ऊर्जा-समिश्र (एनर्जी-मिक्स) को निर्धारित करने वाले कारकों को सूचीबद्ध करते हुए, भारत की भावी ऊर्जा मांगों को पूरा करने हेतु एक विविधकृत फ्यूल बास्केट के होने की आवश्यकता पर टिप्पणी कीजिए।

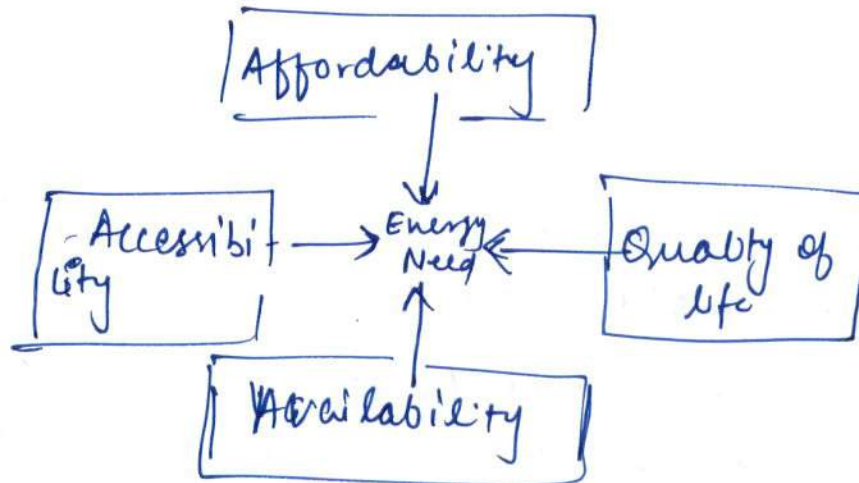
Energy is one of the most complex sector which includes multiple products (oil, electricity, coal, gas etc.) and a separate supply chain infrastructure for each of them (Refinery, pipelines, grid etc.).

Factors in Energy Mix -

- ① Domestic availability and potential of e.g. coal in India is dominant
- ② International Prices & import dependency e.g. oil vs gas.
- ③ Potential of pollution e.g. clean fuel (renewables, methanol)
- ④ Affordability of consumers. e.g. Kerosene under PDS.
- ⑤ Infrastructure. e.g. electricity grids, railway lines, dams, wind farms.
- ⑥ Investment Potential.

Need of diversified basket

①



② To reduce import dependence and ~~import~~ vulnerability to price shocks and achieve self sufficiency

③ Increase domestic production of electricity through Renewables.

④ To meet Paris INDC goals of 175 GW of Renewable power and decrease emission intensity per GDP.

⑤ Clean fuel in daily usage to improve standard of living
(e.g.) Delhi one of the ^{top} polluted cities of world.

⑥ To decrease prices and increase per capita consumption → Inclusive growth
Empowerment of AU

8. Despite being a water-stressed economy, micro irrigation penetration in India remains sub-optimal. Discuss the reasons behind it. Also list measures taken by the government to provide an impetus to micro irrigation.

(150 words) 10

एक जल-संकटग्रस्त अर्थव्यवस्था होने के बावजूद, भारत में सूक्ष्म सिंचाई की पैठ उप-इष्टतम (सब ऑप्टीमल) बनी हुई है। इसके पीछे उत्तरदायी कारणों की चर्चा कीजिए। साथ ही, सूक्ष्म सिंचाई को प्रोत्साहन देने हेतु सरकार द्वारा उठाए गए कदमों को भी सूचीबद्ध कीजिए।

From being a water surplus country, India has come down to water stressed country. Yet best water management practices in agriculture, which consumes about 86% of water in country, ^{are} ~~has~~ not ~~some~~ being practiced.

Reasons

- ① fragmented & scattered farms
⇒ Economics of scale not achieved.
- ② low awareness among farmers about irrigation efficiency & impact on productivity
- ③ cheaper pump sets and subsidized electricity
- ④ lack of political will → No long term vision to manage water as national resource
- ⑤ Poor economic health of farmers and

lack of institutional credit to cover such investments in farm.

Measures

- ① Pradhan mantri kishu sinchaye yojana → one of the components is "Per drop more crop" which promotes states to incentivize sprinkler and drip irrigation
- ② Formation of FPOs → farmers can come together and contribute in investment and also get loans.
- ③ ATMA → to demonstrate best technologies on farm.
- ④ Credit support. (Covered under priority sector lending)

9. What are the issues in effective implementation of Targeted Public Distribution System (TPDS) in India? Do you think direct benefit transfer as an alternative to TPDS is a viable solution to attain food security?

(150 words) 10

भारत में लक्षित सार्वजनिक वितरण प्रणाली (TPDS) के प्रभावी कार्यान्वयन में क्या समस्याएं हैं? क्या आप मानते हैं कि TPDS के विकल्प के रूप में प्रत्यक्ष लाभ अंतरण खाद्य सुरक्षा प्राप्त करने का एक व्यावहारिक समाधान है?

Issues in effective Implementation of

TPDS -

- ① Identification of beneficiary
- ② Exclusion error and limited food basket without attention to nutrition
- ③ demarcation of poverty line
- ④ Creation of dual markets → one through PDS and other open market
- ⑤ Artificially increases prices in open market due to huge public procurement.
- ⑥ maintenance of buffer stock leads to wastages
- ⑦ Issues in distribution channel. Fair Price Shops (FPS) indulges in corrupt practices and leakages
- ⑧ Lack of technology adoption at FPS leads to low accountability.

Recent case of death of 11 year old girl in Jharkhand due to starvation suggests that TPDS has not achieved its aim.

Direct Benefit transfer

- ① can empower people to make choices in nutrition mix and food basket
- ② can reduce exclusion through JAM trinity
- ③ ~~it~~ will reduce procurement cost and wastage of buffer stock
- ④ Targeted beneficiaries can be covered without exclusion.

But poor financial inclusion, lack of banking network in rural areas, poor internet connectivity, Aadhar and privacy issues are hurdles in complete adoption of DBT.

first these issues need to be resolved then only DBT can be a viable alternative

10. Assigning infrastructure status to the logistics industry is a good first move, but there are several other problems related to this sector that need to be addressed. Discuss. (150 words) 10

लॉजिस्टिक्स (संभार-तंत्र) उद्योग को अवसंरचना का दर्जा देना एक अच्छी आरंभिक पहल है, लेकिन इस क्षेत्रक से जुड़ी अन्य कई समस्याएं हैं जिनसे निपटने की आवश्यकता है। चर्चा कीजिए।

Positives of Infrastructure status -

- ① logistics sector can access credit at cheaper rates
- ② is eligible for external commercial borrowing
- ③ can access credit from various institutional ^{investor} and long gestation funds such as insurance and pension funds.
- ④ ~~is~~ eligible for tax incentives.
- ⑤ PPP projects can be initiated & land acquisition will be easier.

Therefore, this status will boost logistics sector which involves transport, storage, handling of goods.

Problems that needs to be resolved -

- ① lack of multimodal transport &

intermodal integration

- ② Imbalances in modal transport.
e.g. Roadways handles more than 60%;
Railways about 30% & Waterways
has meagre share.
- ③ Last mile connectivity absent which
increases turn around time.
- ④ In India, dry ports are not used as
per global level → increases
congestion at coastal ports.
- ⑤ Coastal shipping not allowed to
enter inland waterways.
- ⑥ Inland waterways not developed.
Government efforts.

- ① e-Way Bill for seamless transport.
- ② Multimodal ports under Jal Vikas
pariyojana.
- ③ dry port development.
- ④ PPP in logistics sector.

11. Enhancing private infrastructure spending and revival of stalled projects is critical to the success of Bharatmala Pariyojana. Discuss. Also enumerate measures taken by the government to revive stalled projects on National Highways. (250 words) 15

निजी अवसंरचना व्यय में वृद्धि एवं अवरुद्ध परियोजनाओं का पुनरुद्धार भारतमाला परियोजना की सफलता हेतु महत्वपूर्ण है। चर्चा कीजिए। साथ ही, राष्ट्रीय राजमार्गों से संबद्ध अवरुद्ध परियोजनाओं के पुनरुद्धार के लिए सरकार द्वारा उठाए गए कदमों को सूचीबद्ध कीजिए।

Bharatmala Pariyojana is umbrella project of all roadways construction in India, ⁱⁿ which ~~is estimated~~ investment of 2.11 lakh crore is needed. It includes

- ① Remaining 10000 km of NHDP.
- ② Industrial and economic corridor
- ③ Border Roads
- ④ Coastal road networks.
- ⑤ All national and state highways
- ⑥ Rural roads → in left wing extension of region.
- ⑦ Railways overbridges.

Considering scale of this project, we need following measures for successful implementation—

- ① speed up stalled project by resolving disputes.
- ② PPP e.g. Hybrid annuity model
- ③ land clearances
- ④ Environmental clearances.
- ⑤ Centre-state coordination
- ⑥ Both public and private investment
- ⑦ long term finance through mutual funds etc

Measures taken by government-

- ① Inter ministerial dispute resolution to speed up projects.
- ② PRAGATI Portal - to monitor projects
- ③ Hybrid Annuity model in PPP.
- ④ Budgetary support
- ⑤ land acquisition eased up.
- ⑥ NIIF operationalised.
- ⑦ INUIT → Infrastructure Investment

fund. (On model of mutual fund)
to increase ~~more~~ retain investment

- ⑧ IIFCL
- ⑨ special purpose vehicles.
- ⑧ Integrated transport policy

12. Going forward, the allied sectors will play a critical role in increasing the resilience and improving economic returns in agriculture. Discuss.

(250 words) 15

आगामी समय में, संबद्ध क्षेत्रक कृषि में लचीलापन बढ़ाने एवं आर्थिक प्रतिफल में सुधार लाने में एक महत्वपूर्ण भूमिका निभाएंगे। चर्चा कीजिए।

Allied sectors has emerged as source of assured income to farmers because of more egalitarian distribution pattern. It includes livestock, fisheries, horticulture ^{re are}, forestry etc. Its contribution to agriculture GDP has increased in past few years whereas share of crops has reduced.

Role of Allied Sectors

- ① Assured Income
- ② Diversification in sources of income improves resilience.
- ③ More resistant to drought and climate stress than crops e.g. cattle, horticulture etc.
- ④ do not require large amount of land for rearing. ~~top~~ more egalitarian distribution
→ Small farmers own more than

half of cattle

- ⑤ both input (dung, urine) and output products (milk, wool etc)
- ⑥ Nutritious food → ~~milk~~ milk, meat, fish are protein and $\frac{1}{2}$ vitamin rich
- ⑦ Better income realisation. (as middle-man can be avoided)
- ⑧ Huge export opportunity
- ⑨ Rising middle class $\Rightarrow$ increase in domestic demand.

Above factors clearly indicate that Allied sector could play game changing role in doubling farmers income.

But following challenges should be tackled to make it a reality

- ① Improve veterinary services for better care
- ② Extension services are almost

absent

- ③ No R&D in allied sector
- ④ lack of storage, cold chain.
except in dairy sector.
- ⑤ ~~str~~ Ambiguous laws on ban
on cow slaughter.
- ⑥ Economies of scale not present
e.g. fisheries sector
- ⑦ ~~fr~~ No focus on ~~de~~ holistic develop-
ment of inland fisheries and
deep sea fishing.
- ⑧ Lack of expertise and guidance
e.g. bee keeping.
- ⑨ Inadequate credit

Budget 2018-19 ~~was~~ had a component
of operation greens and dedicated
fund for fisheries and horticulture
development, which is a positive steps.

13. Enumerating the features of Pradhan Mantri Kisan Sampada Yojana, discuss its potential for the growth of food processing sector in the country. (250 words) 15

प्रधान मंत्री किसान सम्पदा योजना की विशेषताओं को सूचीबद्ध करते हुए, देश में खाद्य प्रसंस्करण क्षेत्र का विकास करने की इसकी क्षमता की विवेचना (चर्चा) कीजिए।

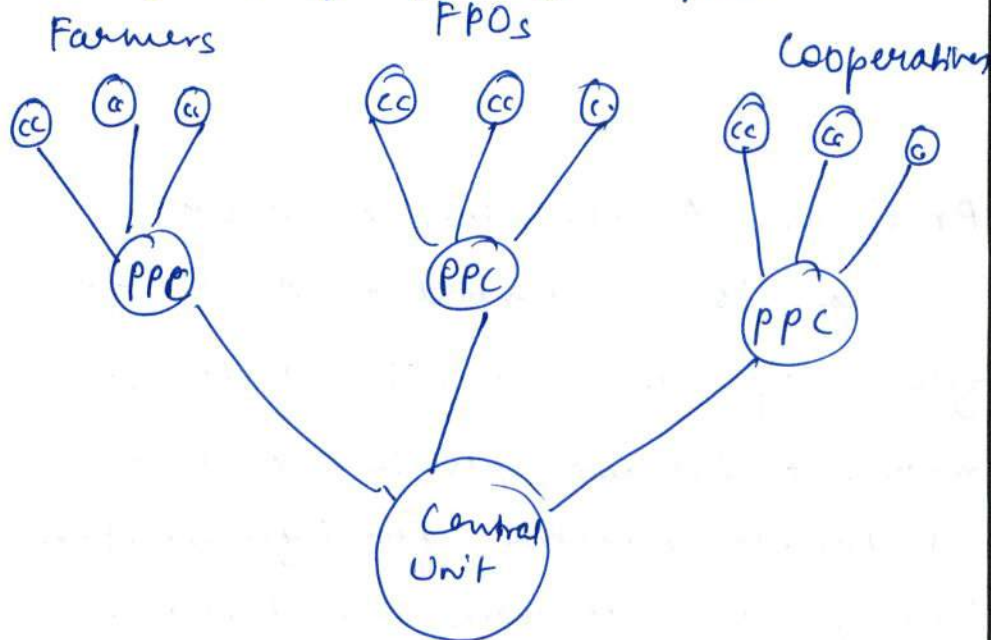
Pradhan Mantri Kisan Sampada Yojana is an umbrella scheme for rejuvenating food processing sector in India. It includes previous schemes and provide incentives for infrastructure development, forward and backward linkages.

- ① Mega food parks.
- ② Integrated cold chain facility
- ③ Hub and spoke model of collection
 - Ⓐ collection centre
 - Ⓑ Primary Processing centre
 - Ⓒ Central unit.

hence bringing market closer to farmer

- ④ forward and backward linkages
- ⑤ transport facility
- ⑥ Capacity upgradation in existing mandi and new warehouses.
- ⑦ Post harvest management

⑧ Testing labs for quality certification

Potential of Sampada

- ① Seamless transport from farm to processing units
- ② Reduction in post harvest losses
- ③ Improved price realisation to farmers. $\Rightarrow$ Increased income
- ④ Employment generation in rural and urban areas.
- ⑤ Less losses $\Rightarrow$ decreased prices for consumers.
- ⑥ Export in ~~the~~ processed food can be

increased.

- ⑦ Nutrition of public can be improved.
- ⑧ Boost to small processing unit
- ⑨ Success of dairy cooperatives can be improved.
- ⑩ Awareness and extension service can be provided through collection centres.
- ⑪ Quality testing can be performed and farmers can be incentivized to improve quality

⑫

14. Enumerate the factors that determine cropping pattern in an agricultural region. Discuss the need for diversification in context of problems being faced by monoculture regions in India. (250 words) 15

किसी कृषि क्षेत्र में फसल पद्धति को निर्धारित करने वाले कारकों को सूचीबद्ध कीजिए। भारत में एकल फसली क्षेत्रों द्वारा सामना की जा रही समस्याओं के संदर्भ में फसल विविधीकरण की आवश्यकता की चर्चा कीजिए।

Factors determining cropping pattern

- ① Fertility of soil
- ② Climate → wet / arid / semi-arid
- ③ Soil type
- ④ Rainfall pattern
- ⑤ Irrigation potential and utilization
- ⑥ government policies and subsidy
e.g. MSP, fertilizer subsidy etc
- ⑦ Size of farm
- ⑧ Mechanization level
- ⑨ Availability of quality input, credit, insurance and market.

Problems due to monoculture -

- ① Infertility of soil increases
- ② Nutrient balance is disturbed
e.g. Nitrogen fixation

- ③ acidification & salinization increases
- ④ vulnerability to pest attack and climate change leading to crop failure increases.
- ⑤ In context of India - monoculture regions predominantly grow crops assured in MSP repeatedly e.g. rice, wheat, sugarcane, jute, cotton etc.
- ⑥ water intensive crops → overuse of ground water
- ⑦ over use of urea
- ⑧ drought resistant crops are not grown
- ⑨ local variety seeds and crops vanish

Hence in this context, diversification of crops is key to the agricultural distress faced in India.

→ decrease vulnerability and loss leading to increasing income

→ With mix of crops water use can be rationalized.

- Soil nutrition can be restored
- drought resistant crops leading to food security e.g. millets.

⑤

Therefore government should incentivize farmers to move towards pulses, horticulture & millets etc by providing input subsidy or including them in MSP.

15. Discussing the opportunities presented by decentralised energy systems, enumerate their environmental, economic and social benefits along with institutional, technical and financial challenges that they present.

(250 words) 15

विकेन्द्रीकृत ऊर्जा प्रणालियों द्वारा प्रस्तुत अवसरों की चर्चा करते हुए, उनके पर्यावरणीय, आर्थिक और सामाजिक लाभों के साथ-साथ उनके द्वारा प्रस्तुत की जाने वाली संस्थागत, तकनीकी और वित्तीय चुनौतियों को भी सूचीबद्ध कीजिए।

Decentralised energy system refers to energy production ~~and consumer~~ near to site of consumption instead of ^{of} accessing through centralised grids.
e.g. Small wind farms, Rooftop solar, mini hydropower turbines.

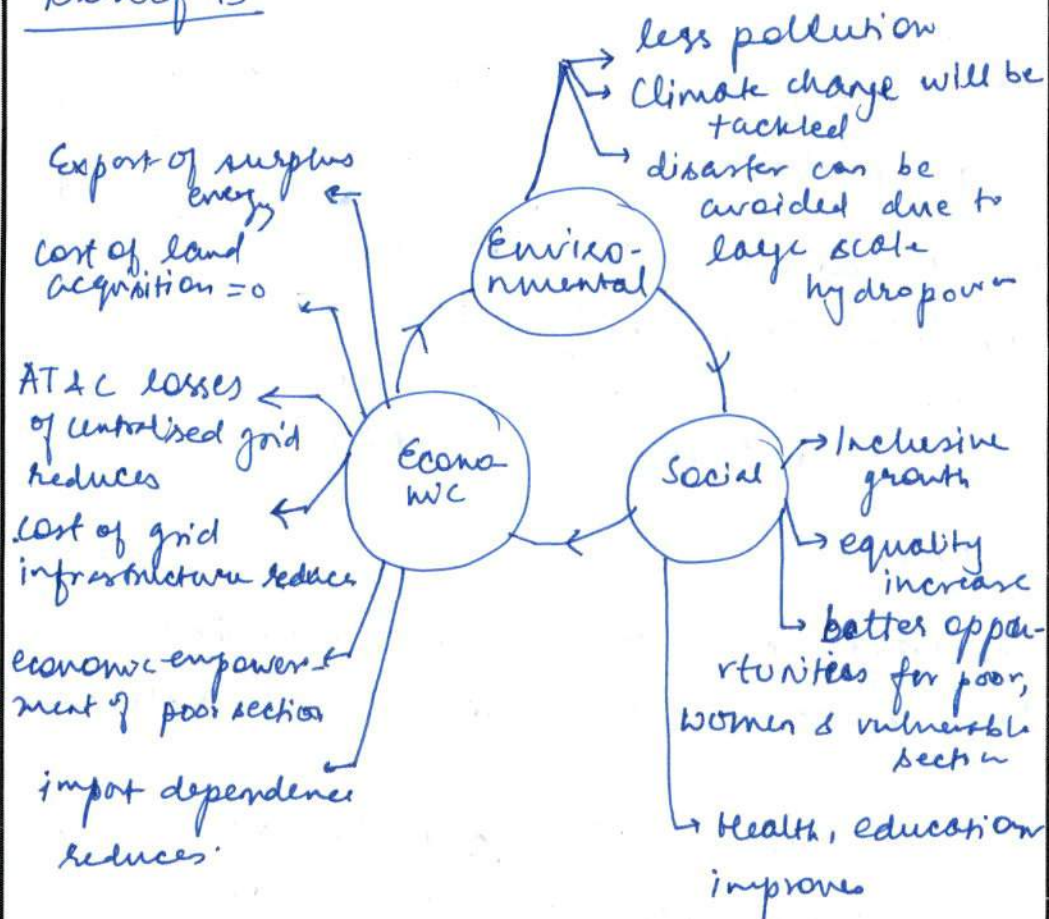
Opportunities

- ① Energy access to all by harnessing huge solar potential, wind energy potential.
- ② Energy connectivity to North east & Himalayan states → huge hydropower potential.
- ③ Small wave energy setups in coastal zones.
- ④ Biogas plants ~~at~~ in villages
- ⑤ Reduction of import and self sufficiency in energy as per SDG-7

⑥ Reduction in current account deficit

⑦ Energy surplus nation.

Benefits



Challenges

Institutional

→ DISCOMs ~~are~~ are reluctant to provide grid connection for sale of excess energy

- multiple departments for approval of one project → delays.
- lack of credit for small energy farmer

Technical

- low adoption of net metering
- maintenance is difficult by common public
- ~~low~~ Technology of storage net developed.
- domestically technical advances are required to reduce cost
- issues in grid connection & stability.

Financial

- High cost of installation e.g. solar roof-tops
- Import dependence
- lack of financial resources to poor, farmers.
- lack of tax incentives and budgetary support.

But KUSUM, Saubhagya etc. are positive steps to incentivize decentralized production.

16. In context of the critical public service role played by the railways, it is difficult to argue that its problems will be solved by privatisation, rather there is a need to work on other options. Discuss. (250 words) 15

रेलवे द्वारा निभाई जाने वाली महत्वपूर्ण सार्वजनिक सेवा को देखते हुए, यह तर्क देना कठिन है कि निजीकरण से इसकी समस्याएं सुलझ सकेंगी। इसके बजाय अन्य विकल्पों पर कार्य करने की आवश्यकता है। चर्चा कीजिए।

Railways are lifeline of our country.

Reasons -

- ① Huge network in every part of country
- ② Handles about 67% of passenger traffic
- ③ About 34% of freight traffic
- ④ Cheap passenger services that increases mobility hence employment opportunity of poor section
- ⑤ Transport of coal, oil, water etc for energy production.
- ⑥ low emission per passenger compared to other mode of transport.

But safety issues, degrading customer service, deteriorating punctuality etc force us to think, can privatisation overhaul Railway?

Is Privatisation a solutionYes

- ① Better services at competitive prices.
- ② Modernisation & upgradation
- ③ Innovation and expertise ~~cost~~
- ④ Efficient management.
- ⑤ focus on punctuality & customer services.
- ⑥ End of monopoly
- ⑦ In most advanced ~~prase~~ countries Railways are privatized.
- ⑧ Less burden on government → shift to regulatory role ~~not~~ instead service provision ⇒ Removal of conflicting interest

No →

- ① Unaffordable services for poor.
- ② Issue of freight corridor management.
- ③ e.g. Airways → high prices. Same will happen to railways.
- ④ Issue of private - public corruption
- ⑤ Issue is Integration of transport when multiple private companies are operating.

What should be done

- ① Speed up dedicated freight corridor development. → Punctuality will be improved.
- ② Improve for customer service
 - focus on cleanliness
 - better food
 - Biotoilets

These 3 areas can be outsourced to private sector with accountability mechanism.
- ③ PPP in station development & maintenance
- ④ Track upgradation, fog visibility devices and anti collision devices can be used for safety
- ⑤ Wi-fi services should be provided
- ⑥ Cross subsidization should be phased out
- ⑦ focus on non-fare revenue such as advertisement.

17. The irony of high consumer prices when farmers do not receive adequate margin for their produce calls for an overhaul of agriculture marketing. Discuss the various steps taken by government in this regard. Also suggest ways to further reduce the gap between consumer prices and farmer realisation. (250 words) 15

जब किसानों को उनकी उपज के लिए पर्याप्त लाभ नहीं मिल पाता है तो ऐसे में उच्च उपभोक्ता कीमतों की विडंबना कृषि विपणन में एक आमूलचूल सुधार की माँग करती है। इस संबंध में सरकार द्वारा उठाए गए विभिन्न कदमों की चर्चा कीजिए। साथ ही, उपभोक्ता कीमतों और किसानों को प्राप्त होने वाले मूल्यों के बीच अंतराल को और कम करने के तरीके सुझाइए।

It is estimated that farmers receive less than 30% of what a final consumer pays. This leads to dual problem of -

- ① Inflation in economy
- ② Poor financial health of farmers

Both lead to increased subsidy burden of government which further imp. increases fiscal deficit and consequently tax burden of citizen.

This clearly indicates that issues lies somewhere in between. i.e. marketing.

Challenges

- ① APMC Act mandates ^{first} selling of produce at mandis $\Rightarrow$ farmer can't directly sell
- ② ~~the~~ cartelisation of traders leads to

decreased bargaining power of farmers and consumers.

- ③ Multiple market levy
- ④ Inadequate transport and storage infrastructure which further increases wastages → driving up the cost.
- ⑤ lacunae in MSP regime leads to distress sale at low prices.

Various steps

- ① e-NAM → to create unified market and digital auction for better price realisation.
- ② Model contract farming legislation
- ③ Farmers Producers Organisation to increase bargaining power of farmers.
- ④ GRAMS → Rural haat.
- ⑤ Exempting horticulture produce from APMC Act.
- ⑥ SAMPADA scheme → enabling farmers to

directly sell to food processing units.

What more should be done

- ① Replicating dairy co-operative models where farmers realize about 75% of consumer price.
 - ② Promoting more FPOs & cooperatives.
 - ③ All states should enact model Agriculture Produce & Livestock Marketing Act released by union.
 - ④ Eliminate multiple levies.
 - ⑤ Promote farmers to adopt to allied sector as well.
- ~~rehabilitation of~~
- ⑥ Incentives to states to join e-NAM.
 - ⑦ Allow futures trading for better price discovery in agriculture sector.
 - ⑧ Allow contract farming.

18. Identifying the key elements under the Mission for Integrated Development of Horticulture (MIDH), briefly explain how it can lead to holistic development of the horticulture sector in India. Also elaborate the factors which act as roadblocks for the efficient supply chain of Fruits and Vegetables sector in India. (250 words) 15

बागवानी के समन्वित विकास के लिए मिशन (मिशन फॉर इंटीग्रेटेड डेवलपमेंट ऑफ़ हॉर्टिकल्चर: MIDH) के अंतर्गत प्रमुख तत्वों की पहचान करते हुए, संक्षेप में व्याख्या कीजिए कि यह भारत में बागवानी क्षेत्र के समग्र विकास को किस प्रकार बढ़ावा दे सकता है। साथ ही, भारत में फल एवं सब्जी क्षेत्र हेतु प्रभावी आपूर्ति श्रृंखला में बाधक के रूप में कार्य करने वाले कारकों का सविस्तार वर्णन कीजिए।

Key element of mission for Integrated Development of Horticulture

It includes four submission -

- ① Submission on Agriculture Extension & technology
- ② Submission for quality seeds
- ③ Training and capacity building
- ④ focus on forest agriculture forestry
- ⑤ Backward & forward linkages.

Roadblock in efficient supply chain

- ① Inadequate cold chain & storage facility. only 2% of agriculture produce can be stored.
- ② Wastage of food during transport.
~~Cold~~ Refrigeration vehicle not available
- ③ Poor condition of infrastructure connectivity from farm to markets. leads to delays.
- ④ In some state APMC Act. covers horticulture produce also leading to market monopoly, delay in sale. Unnecessary middle men.
- ⑤ Price fluctuation problem leads to farmer protest and destroying their own produce
- ⑥ Still fragmented market. As

retail shops such as Walmart are
still not fully developed in India.
Street vendors create fragmented
market

19. It is argued that fertilizer subsidies have a negative impact on promoting Organic farming in India. Comment. Also, critically analyse the advantages of replacing direct benefit transfer in fertilizers with direct income support for farmers. (250 words) 15

यह तर्क दिया जाता है कि भारत में जैविक खेती को बढ़ावा देने में उर्वरक सब्सिडी का एक नकारात्मक प्रभाव रहा है। टिप्पणी कीजिए। साथ ही, उर्वरकों के लिए प्रत्यक्ष लाभ अंतरण के बदले किसानों को प्रत्यक्ष आय सहायता प्रदान करने के फायदों का आलोचनात्मक विश्लेषण कीजिए।

The fertilizer subsidy forms one of the highest subsidy burden of state.

Impact of Fertilizer subsidy

- ① Skewed adaption & overuse of Urea & loss of soil fertility
- ② Benefit to large farmers more
- ③ diversion of fertilizer for chemical use.
- ④

Impact on Organic farming

- ① Organic farming requires balanced nutrients in soil. whereas fertilizer
→ fertilizer
subsidy is limited to only few such as Urea, P&K which makes micro-nutrients costly for organic farmers.
- ② Inputs for organic farming costly leads to costly produce which deters

consumers from buying. Hence low realisation of Income.

Therefore costly input & expensive produce both impact organic farmers negatively.

Also excess use due to low cost leads to water overuse, pollution of water surface water bodies and negative impact on water ecosystem. This water-stress indirectly impacts organic farmers.

Direct benefit transfer in fertilizer is paid to companies upon sale to farmers as per details recorded at point of sale.

- It does not prevent leakage
- possibility of displaying oversale by recording wrong amounts
- No way of knowing in fertilizer reached targeted beneficiaries.

- large & farmers get more benefits & affluent
as their cost of production (total) decreases → Against principle of progressive benefit.

Benefits of Direct Income Support

- Karnataka's Rythu Bandhu scheme is model where Rs. 4000 is transferred before every crop season to all farmers to cover input cost.
- This reduces subsidy leakage.
- targeted farmers e.g. small & marginal farmers are empowered in making nutrient choices and incentive to reduce overuse of urea.
- large farmers won't get disproportionate benefits.
- Benefit to organic farmers in driving down input cost.
- debt burden will decrease.
- diversion of urea can be tackled.

20. What do you understand by Seed Replacement Rate? Explaining the concept of breeder, foundation and certified seeds, highlight the major policy initiatives taken in order to address the challenge of quality seed availability to farmers. (250 words) 15

बीज प्रतिस्थापन दर (सीड रिप्लेसमेंट रेट) से आप क्या समझते हैं? ब्रीडर, फाउंडेशन और प्रमाणित बीजों की अवधारणा की व्याख्या करते हुए, किसानों के लिए गुणवत्तापरक बीजों की उपलब्धता की चुनौती का समाधान करने हेतु की गई प्रमुख नीतिगत पहलों पर प्रकाश डालिए।

Seed Replacement Ratio is defined as ratio of certified seeds in total sown area to normal/traditional seeds used in net sown area in all cropping seasons.

In India SRR is below target level of 20%.

Breeder seeds are produced & marketed by Indian council of Agriculture Research whereas foundation & certified seeds are released by National seed corporation.

Challenges in quality seeds availability -

- ① ~~low~~ Research & Development inadequate
- ② fast green revolution, no active effort in developing High yielding variety seeds
- ③ HYV seeds limited to crops announced

in MSP.

- ④ No effort to develop ^{HYV} locally produced crops such as millets.
- ⑤ lack of ~~to~~ market linkage and high costs of seeds.
- ⑥ lack of credit & debt burden.
- ⑦ ~~unregulate~~ inadequate regulation in GM crops. ~~Report~~ → leads to proliferation without proper monitoring.

Govt. Initiatives

- ① Protection of plant varieties and farmers Rights Act
- ② National Seed Plan 2005
- ③ National seed policy → Aim to achieve 20% SRR.
- ④ National Seed Corporation & ICAR involved in developing HYV seeds
- ⑤ Efforts to develop GM seeds under monitoring of GEAC.

संस्कृत में 'अ' और 'इ' के अक्षरों में
अंतर है। 'अ' का अर्थ है 'ऊपर' और 'इ' का अर्थ है 'नीचे'।
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