



VISION IAS

www.visionias.in



GENERAL STUDIES (TEST CODE : 1060)

Name of Candidate	Chahat Bajpai		
Medium Eng./Hindi	English	Registration Number	22842
Center	Online	Date	10/08/18

INDEX TABLE		
Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
6	10	
7	10	
8	10	
9	10	
10	10	
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।

16-B, 2nd Floor, Above National Trust Building, Bada Bazar Marg, Old Rajinder Nagar, Delhi-110060

M-1/4, Plot No-A-12/13, 1st Floor, Ansal Building, Dr. Vidya Sagar Homoeopathic Clinic, Mukherjee Nagar, Delhi-110009

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.

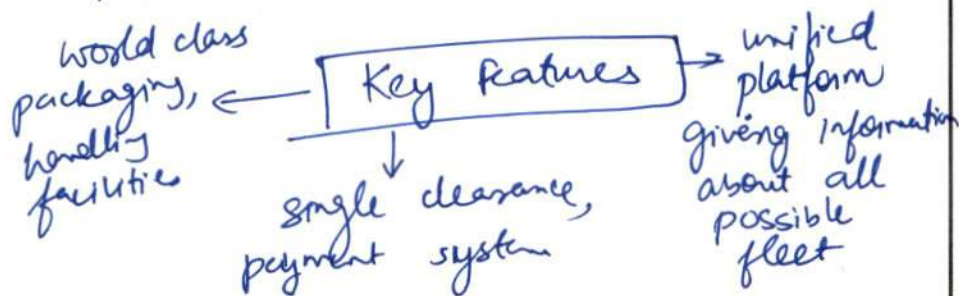
6.

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।

Presently the logistics cost in India are one of the highest globally (18% compared to 8% in China, UK). This reduce competitiveness for our exports. On this regard, integrated multi-modal transport system is proposed.



Prospects :

1. Bring down logistics cost - make exports more competitive
2. Create employment in the supply chain.

3. Provide better multimodal mix
(presently Roads - 65%, railways-33%,
waterways - 2%)
While cost of waterways is least
and roadways is highest.
4. Provide better capacity utilisation
of available fleet.

Challenges

1. Roadways, railways, waterways
are governed by separate ministries
in silos
 2. Huge financial investment needed
for upgradation - of almost \$4.5
billion by 2030 (ECO survey 17-18)
 3. Old fleet
 4. Specific problems to waterways like
siltting, cross subsidisation in railway.
- As suggested by Rakesh Mohan
committee as a first step
a unified transportation ministry
needs to be created.

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?

Food processing in India accounts for 20% of agricultural GDP and provides 17 lakh jobs. However, as estimates show this is much below its potential.

SIGNIFICANCE OF CONTRACT FARMING FOR THIS :

1. Through contract farming, the private players will enter into a contract with the ~~pro~~ farmers to produce what they will require ~~for~~ for processing, thus assured raw materials.
2. Bring greater investment from private sector which is yet to pick despite 100% FDI.
3. Upgrade storage, warehousing, cold

Storage chains which have remained underdeveloped due to reservation for SMEs.

Changes needed

1. Legislation : presently there is no legislative framework. Model contract farming ~~act~~ bill needs to be adopted.
2. Necessary so that prices not dictated on farmers, & under no case land of farmer is forfeited.
3. Amendments needed to APMC to give marketing freedom.
4. Amendment needed to Essential commodities act to allow storage of greater quantities of raw materials.
5. Institutional arrangement for grievance redressal

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।

In India, 85% farmers are small and marginal with average large land holding of ± 5 acre less than ± 1 acre. Additionally many are farm labour.

With increasing rural-urban migration and disenchantment of youths to agriculture, there is growing threat to food security scenario.

In this regard, there are need for tenancy reforms.

Presently tenancy laws are very stringent and allow transfer of land after to tenant after a fixed px period.

This acts as a deterrent and people prefer to keep land uncultivated.

rather than leasing it-

Therefore there is ~~need~~ need for
conducive legal framework which
promote land leasing.

In this regard model land leasing
Act of Niti aayog holds immense
significance - It provides -

1. security of tenure to tenant.
2. Land rights of owners to be protected
3. Tenancy based on a prior agreement
violation of which can lead to cancellation
of all rights.
4. Allow tenant to access formal credit
~~state~~ by virtue of being cultivators.

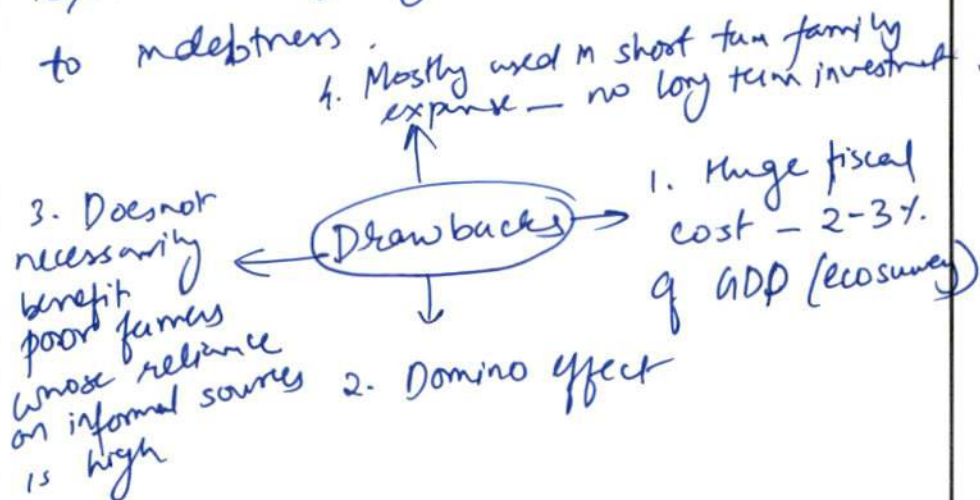
Thus the states need to
adopt such a legal framework.

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 माफी 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।

Farm loans waivers are announced by governments due to rising number of farmers suicides (almost 15,000 every year) mainly due to indebtedness.



Moreover it affects the overall credit culture among farmers, and leads to moral hazard that is even those who can pay do not pay.

Thus any waiver should be announced only after a careful study at ground of its impact. ~~But~~ Also, long term measures like marketing reforms, value addition are needed to reduce farm distress.

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।

Minimum Support Price of crops is announced by government every year for 23 crops based on CACP recommendation.

It is a short term solution as it removes ~~the~~ risk of market failure.

- However several long term costs -
1. Cereal centric growth - as procurement done only for cereals.
 2. Problem inflation, huge import bill for oilseeds and pulses
 3. Regional disparity as 67% procurement done in 5 states.

4. Equity - Shanta Kumar Committee pointed out only 5% of small/marginal farmers benefit from MSP.

5. leads to rotting of food grains
56. Repercussions at WTO
Measures to reform

As suggested recently by a government appointed committee, price deficiency payment-based

on crop quality can be give like Bhavantar Bhugtan Yojana of M.P.

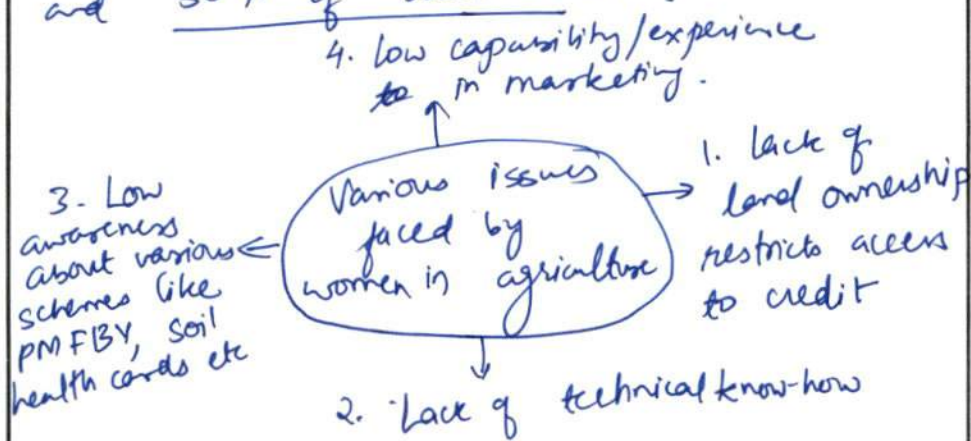
or alternatively, a fixed payment can be made to farmers like in US and China.

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 growing urbanisation, triggering migration of male members of the family, there is growing trend of feminisation of agriculture.

Today women account for almost 80% of farm labourers and 50% of cultivators.



As a result, the agricultural productivity suffers and rural households are not able to get best price for their produce.

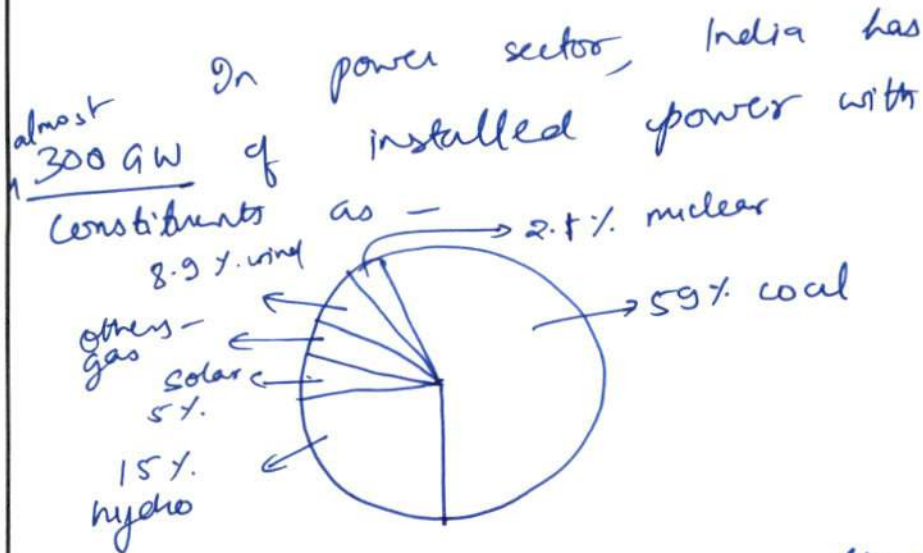
Gender specific Interventions

1. Training / capacity building & increasing awareness of schemes
2. Provide voice / platform for collective bargaining through Mahila Kisan Shakti Sangathan
3. Providing access ~~to~~ to credit through SHG - bank linkage
- also as NITI aayog proposed credit as produce of crop and not as owner of land.

Further any technological efforts towards mechanisation should always consider its impact on women who are largely involved in sowing, weeding etc.

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 विविधित फ्यूल बास्केट के होने की आवश्यकता पर टिप्पणी कीजिए।



Thus India has heavy reliance on coal, but share of renewable energy is increasing.

FACTORS THAT DETERMINE ENERGY MIX

1. Availability of raw materials - like coal easily available but not nuclear fuel
2. Availability of technology - like for renewable energy limiting its

Samprant rise.

3. Other factors : cost, environmental concerns, historical factors (like coal based technology 1st to develop) etc.

Need for diversified fuel basket

1. Too much reliance on coal needs to be avoided ~~as~~ due to environmental concerns.
2. Share of nuclear power to replace coal as base load - like Parliament has set target of 25% by 2050.
3. Share of renewable energy needs to rise
 - to achieve INDC under Paris treaty
 - to address concerns of air pollution and climate change.
4. Need to utilise huge hydelo potential in north east.

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।

Micro irrigation refers to use of techniques like sprinklers, drip irrigation instead of flood irrigation. Its penetration is limited to 5% of irrigated area despite several benefits.

REASONS

1. High initial cost in installation
2. Need for technical knowhow in operation and management
3. Already huge subsidies like free electricity $\therefore$ low incentives for farmers.
4. signs of water stress are still not too acute ~~to~~ in most parts.

A. Report by UN water predicts that by 2030, India will face severe water crises. Since agriculture accounts for 88-90 % of ^{fresh} water consumption, government has taken several measures to give impetus to micro-irrigation.

1. Dedicated fund under NABARD for long term investment in agriculture
2. Capability enhancement of rural youths in new technologies.
3. Pacts with Israel to support technology transfer.
4. Efforts to identify and spread scalable projects.

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?

Targeted PDS system in India is a mechanism to implement National Food Security Act 2013 which assures 66% of country's population rice, wheat and pulses at Rs 3/2/1 per kg.

Despite being largest food security initiative, it suffers from several challenges like:

1. Procurement - done by central government through FCI
 - 67% is confined to 5 states.
 - as Shanta Kumar committee pointed out only 5% poor marginal farmer benefit from MSP.
2. Storage - inefficient handling, storage in warehouses and not in silos → rottening of grains.

3. Distribution : CAG report pointed delays in identification of beneficiaries, inclusion and exclusion errors.



However there are certain issues

like -

1. Money might not be used for food grain ~~purchase~~ ^{production} - conspicuous spending
2. last mile connectivity in access to banking services missing

T PDS has served as a win-win situation for farmers as well as poor households. ∴ any efforts at revamp should be well debated.

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।

Logistics industry in India is 3rd largest in the world providing employment directly to 1.5 million people.

Assigning infrastructure status will help bring greater funds to (specially long term investment). However, there are many other challenges which the sector face.

Challenges

1. Delays in environmental / forest clearances (like Bullet train is going to miss the 2018 December starting target)
2. land acquisition is a hurdle
3. Mostly sector is in unorganised sector - new policy challenges due to GST, eway bills.

4. Old, inefficient fleet.
5. Unfavourable ~~rai~~ multimodal mix — heavy reliance on roadways (65%).
6. Cross subsidisation in railways.
7. Need for long term finance but banking credit not picking due to huge NPAs (11.6%).

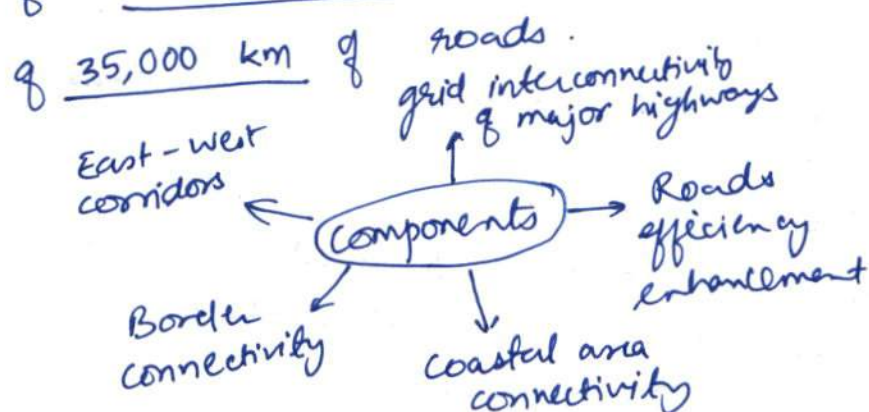
Measures needed

1. Need for integrated logistics ministry as suggested by Rakesh Mohan committee.
2. Need to attract funding through bonds, and diplomatic talks to receive sovereign wealth funds like UAE.
3. Online single window clearance mechanism.
4. Effective risk sharing in PPP as suggested by Kelkar committee.
5. Need for wholesale banks
6. Need to address bottlenecks due to e-way bills, GST.

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 the major infrastructure revamp scheme in the road sector with investment of Rs 5-35 lakh crore and addition



For its success, private & infrastructure spending and revival of stalled projects is most critical.

PRIVATE SPENDING

1. Economic survey 2017-18 predicts that by 2030, India needs additional \$ 4.5 billion infrastructure spending,

But at current price we would be able to meet only \$3.9 billion. Therefore, role of private sector is crucial.

2. Government with limited budgetary resources need to spend on social-welfare scheme like education, health etc.

3. Private sector brings along superior technology and management professional.

4. Essential to bridge fiscal deficit.
For this, government is increasingly engaged through PPP - BOT, EPC, HAM etc.

REVIVAL OF STALLED PROJECTS

1. Stalled projects leads to price escalation, increased debt on borrowed money.

2. Scarce national resources remained roped in unproductive sectors.

3. They lead to increased NPAs on banking sector (11.6% of Gross)

lending (presently) due to which
banks are reluctant to lend.

But owing to various efforts
by the government, stalled projects
have declined from 43% of
total projects in 2012 to 25%
now.

MEASURES:

1. Faster clearances: new regulations
prescribe that no clearance is
needed to roads less than 100km.
- atom coded scheme for environment
clearance
 2. NIIF - India's sovereign wealth
fund to attract investment.
 3. Creation of land banks
 4. Online, single window clearances.
- Further ~~an~~ other measures as
per Kelkar committee recommendations
like amending POCA 1988, equitable
risk sharing in PPP etc are needed

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।

Present government has set the target to 'DOUBLE FARMER'S INCOME BY 2022'. For this, Ashok Dalwai committee has specifically outlined role of allied sectors.

POTENTIAL

1. Livestock :

- India has world's largest livestock population at 300 million
- It is more equitable than farming as majority of farmers are small and marginal
- Significance in ~~in~~ women empowerment - as they constitute 75% of workforce.
- Booming market - in urban India, already per capita consumption at 377 gm is higher than global average.

2. Agroforestry

- National forestry Policy 1988 clearly identified potential of agroforestry - in additional income as well as meeting forestry targets

3. Poultry / Fishing

- Protein inflation shows growing demand for these products.

4. Others : apiculture,

- These are not dependent on monsoon cycles and ensure regular income.

HOWEVER, there are certain challenges in expansion of allied sector.

1. Livestock - low global prices (especially ^{since} after EU abolition of quotas in 2014)

- Farmers protests in Mandla last year showed, they are not getting remunerative prices.
- Milk yield of Indian cattle is much lower.

2. Poultry / Fishery - Bans on exports were imposed due to not meeting Sanitary and Phytosanitary quality standards
3. Farmers lack technical knowhow, initial seed capital.
4. Despite huge potential, they receive only 4% of agricultural credit. BUT, given their immense potential government has taken several steps to promote allied sector
1. Dairy Development fund under NABARD of 10000 crore
2. NDDB is instrumental in promoting milk cooperatives (Amul success)
3. Backyard Poultry scheme especially for BPL households
4. Allied sector already included in priority sector lending.

Allied sectors promise huge returns, irrespective of non season farmers, small land size. ∴ needs to be promoted.

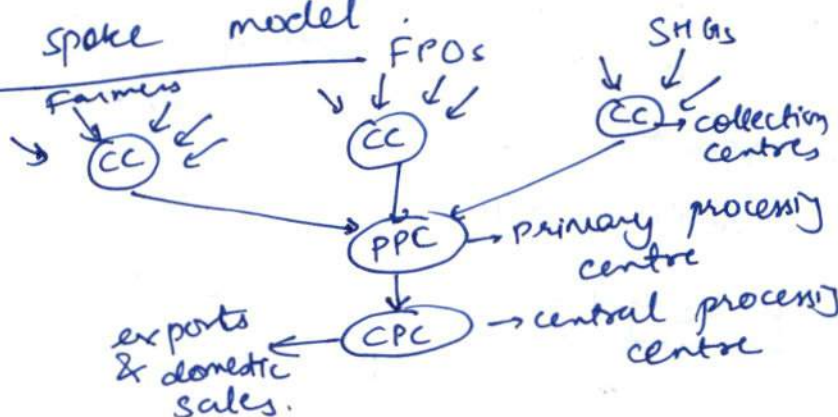
13. Enumerating the features of Pradhan Mantri Kisan Sampada Yojana, discuss its potential for the growth of food processing sector in the country. (250 words) 15

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 (PMKSY) is an umbrella scheme which subsumes all the existing schemes like mega food parks, integrated cold storage development etc.

FEATURES

1. It's main component mega food parks scheme is designed on hub and spoke model.



2. Investment : It aims to increase investment in food processing infrastructure like warehousing,

cold storages , packaging and handling
etc.

3. Reap potential of regional diversities -
by locating food processing plants
throughout the country including NE region.
4. Reduce logistics cost - through reaping
potential of waterways

POTENTIAL FOR FOOD PROCESSING

1. Increase growth - Food processing sector
values at \$ 135 billion and is
growing at 8% per annum but
this growth rate can be enhanced
to double digit.
2. Create employment - especially
for rural youths (Presently, as per
ASI 2010 17 lakh people are
employed in it)

3. Reduce food wastage - post harvest losses in India as high as 30-40%.
4. Enhance farmer's income - through value addition to their produce.
5. Foreign exchange earning - India has advantage of geographical proximity to food importing regions like west Asia.
6. Reduce logistics cost through increasing competitiveness - presently it account for 18% compared 8% in China.

Overall, the scheme has advantage that it provides a single support structure rather than multiplicity of schemes with overlapping domains.

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।

Cropping pattern refers to cycle of crops that are grown over a ~~part~~ piece of land throughout the year.

FACTORS THAT DETERMINE IT :

1. Availability of ~~no~~ irrigation facilities
— as monsoon rains confined in 3-4 months
2. Weather patterns of the place — like places near Himalayan belt are covered with snow in winter and no cropping possible.
— weather pattern is a key determinant of selecting crop like spices in Kerala.
3. Entrepreneurial ability / capital base with the farmer.

4. Government policies relating to procurement as they insure safety against market failure.
5. Topography / soil type in the region like soybean, cotton chosen in black soil belt.

Due to unwanted consequences of Green Revolution and government procurement, there is over focus on cereals ~~on~~ leading to monoculture in several regions.

PROBLEMS DUE TO MONOCULTURE

1. Economical costs - over production leading to price crash of some crops while for other like oilseeds, pulses, India has to rely on imports
2. Environmental costs - monocropping leads to depletion of soil minerals.

It also causes serious water stress to regions (like ground water depletion in Punjab and Haryana)

3. Others : reduces resilience against crop failure or market failure, increases cost on farmer to apply fertilisers, reduces scope of food processing.

In this light, there is urgent need for crop diversification. Like, in ~~between~~ ^{between} two cereals, leguminous crops can be sown which naturally nourish the soil.

The crop chosen should be less intensive on resources and should depend on other minerals than ~~main~~ ^{main} crop.

Understanding its potential government has taken several steps like locating maize processing factory in Patiala to promote maize cultivation.

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 ~~and~~ energy systems are mostly off grid power generation systems such that there is localised generation as well as demand.

OPPORTUNITIES

1. Environmental :

- decentralised solar power plants for heating / lighting can reduce reliance on thermal power - which is major source of global warming.

- They also reduce costs due to deforestation, mining of coal etc.

2. Economic :

- Reduce costs involved in transmission infrastructure - transmission cables, transformers etc.

create employment opportunities for local youths in maintenance and operations.

3. Social :

Will help achieve target 7 of SDG that is access to clean and reliable energy.

huge potential for rural India - still 4 crore households lack access to energy.

Improve living standard of people through access to healthcare, education (e-learning).

Increase farmer's income through cold storages

~~Have~~ Because of their significance DDU GSY had component of decentralised energy systems for LWE / remote villages. And they played critical role in achieving 100% electrification of villages in March 2018.

However, they do present certain challenges like :

1. Institutional - presently no sign single agency is accountable for it, like overlapping domain of MNRE, IREDA etc.
2. Technical - High technology associated to power storage is still in developmental stage.
- Also there is dearth of trained manpower
3. Financial - They involve large initial investment though recurring costs are low.

However, in order to achieve vision of 'universal energy access' they form a critical component.

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।

Indian railways is the world's largest organisation employing 1.3 million people and transporting 26 million people everyday.

ROLE IN PUBLIC SERVICE

1. Provide interland connectivity to remote villages
2. low cost ~~operati~~ services - fares for unreserved category have not been raised from over a decade.
3. Generate large employment

Because of its critical role in public service, it is being run more as a social service organisation than an economic entity. This has lead to various issues plaguing

Indian railways, giving calls for privatisation.

PROBLEMS IT IS FACING

1. High operational ratios - of 0.95, even exceeded. 1 for a brief period in 2017, shows declining profitability.
2. Safety issues - on an average 100 major accidents every year leading to heavy toll on ~~prices~~ lives.
3. Cross subsidisation - freight trains which account only $\frac{1}{3}^{\text{rd}}$ of total trains generate 65% revenue.
4. Old, worn out tracks Khanna committee 2008 pointed out that 25% railway tracks need urgent replacement.
5. Problems in delay of trains, customer services (CAG flagged poor quality food), sanitation, security etc.

In the light of these problems, and increasing competition from roadways and waterways (share of roads in total logistics has increased to 65%), there are proposals of privatisation.

MERITS OF THIS

1. Private sector will bring better technical acumen, managerial capability like in advanced signalling system
2. It can significantly improve customer experiences

3. Bring greater investment for upgradation

But a poor developing country like India ~~not~~ cannot afford to make railways a completely private organisation. Rather,

- as Bibek Debroy committee suggested outsource non core functions to private sector
 - use non fare sources like monetisation of land.
- Formation of Rail Tariff authority is a welcome step.

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।

Agricultural marketing in India is government governed by numerous state controls - APMC act, Essential commodities act etc. As a result farmers are forced to sell their produce to APMC mandis where traders often form cartels.

Several studies have shown that farmers do not get more than 30-40% of the cost of that consumer pays - due to presence of numerous intermediaries and less scope for price discovery.

In this regard government has taken several steps to reform

agri-marketing.

MEASURES TAKEN

1. e NAM : through this 585 APMC markets have already been connected and price is determined based on supply and demand.
2. Agriculture Infrastructure Fund - to upgrade storage, terminal infrastructure of APMCs
3. Proposal to remove perishables out of ambit of APMC
4. Recent budget proposal to convert rural haats into Gramin Agricultural Markets
5. Model corp. commercial farming act by NITI Aayog to give greater freedom to farmers.

Further to reduce gap in prices
what consumer pays and farmers
get, following measures can be
taken :

1. Encouraging Farmer's Producing Organisation to directly market their produce
2. Removing restrictions under Essential Commodities Act.
3. Encouraging variation through organic farming which fetch higher prices.

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 ऑफ 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 के हेतु प्रभावी आपूर्ति श्रृंखला में बाधक के रूप में कार्य करने वाले कारकों का सविस्तर वर्णन कीजिए।

India is world's 2nd largest producer of fruits, vegetables with 1st position in mangoes, banana and several others. In order to promote the holistic development of this sector, government has started MIDH.

KEY ELEMENTS

1. National Bamboo mission - to increase bamboo productivity in north east
2. Providing technical assistance through better quality seeds a
3. Help farmers build resilience against climate change.

4. Coconut development board - for financial and technical support to coconut farmers.
5. Provide assistance to increase value addition, to increase market value and reduce perishability.
6. Assistance to exporting organisations.

ROADBLOCKS IN EFFICIENT SUPPLY CHAIN

1. Procurement : is not done at door-step of farmer - who often lack storage facility - leading to distress sale.
2. Lacks storage - have inadequate cold storages, vehicles with cold storage refrigerators leading to high perishability.
3. Value addition - presently it is limited to 30-40% of total yield.

4. Marketing - Farmers donot have marketing freedom, leading to poor price discovery.

On this light, MIDH holds significance.

1. It can improve post harvest storage facilities
2. Through satellite monitoring (CHAMAN project) yield can be estimated and advanced measures can be taken to curb inflation

3. Along with this budget provision of Operation TOP (for tomato, onion and potato), APMC reform measures to remove perisables, PMFBY uniform insurance at 5% premium also contribute to holistic development of sector.

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।

Organic farming is a type of farming which involves minimal to zero usage of chemical fertilizers, pesticides, herbicides etc and rely on organic manure, vermiculture and soil's natural capacity to regenerate.

It has a booming & market due to increasing disposable income of people and greater health concerns. However the supply is unable to keep up with demand.

NEGATIVE IMPACT OF FERTILISER SUBSIDY

Farmers in India are indirectly given huge subsidies (amounting

to almost ₹0,000 crore in 2017-18) for NPK fertilisers. This has led to greater usage of fertiliser and low incentive to move to organic farming.

Also yields of high quantum can be achieved through application of fertilizers

Manure needs to be applied in bulk quantity - making it less user friendly.

Advantages of DBT

1. Presently subsidies are given to fertilizer companies based on nutrient content → lead to inefficient firms continuing oppe operations.
2. Huge underrecoveries for firms due to delays in payment.

3. Only 50% of subsidy reach small marginal farmers who constitute 85% of total farmers.
4. Diversion of subsidised area to ~~car~~ industries, neighbouring countries.
5. Additionally, it will help resolve inclusion exclusion errors.

However, given that fact that majority of farmers are small and marginal, they often lack working capital to purchase at market cost and later get refunded by DBT.

Therefore my proposal for DBT should be first tested on a smaller scale.

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

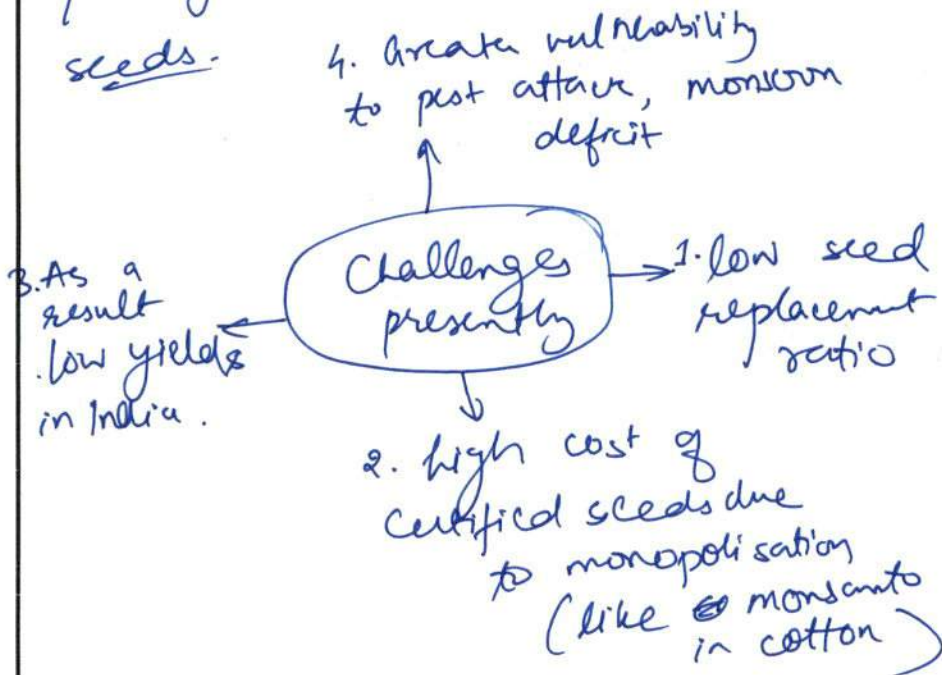
बीज प्रतिस्थापन दर (सीड रिप्लेसमेंट रेट) से आप क्या समझते हैं? ब्रीडर, फाउंडेशन और प्रमाणित बीजों की अवधारणा की व्याख्या करते हुए, किसानों के लिए गुणवत्तापरक बीजों की उपलब्धता की चुनौती का समाधान करने हेतु की गई प्रमुख नीतिगत पहलों पर प्रकाश डालिए।

Seed Replacement Ratio refers to the ~~proportion~~^{ratio} of seeds which are certified to that of farm saved seeds.

Presently, various government R&D organisations under ICAR and private players breed various seed varieties to inculcate desirable traits like short growing season, higher yield, greater tolerance to draughts etc. These seeds are called breeder seeds and the seeds which are bred are called foundation seeds.

Finally, after research and farm testing, the seeds

which have been certified for quality are called certified seeds.



Policy Initiatives

1. National Seed mission ²⁰¹² which aims to increase seed replacement ratio
2. Anti monopolistic policies like government recently cut royalty to Monsanto.

3. Plant varieties is a component of intellectual property rights to encourage initiatives by farmers.
4. Research by publicly funded laboratories like Pusa which developed to high yielding variety of arhar.