VISION IAS

www.visionias.in

GENERAL STUDIES (TEST CODE : 1407)

Name of Candidate	Nikhil Mahajan		
Medium Eng./Hindi	English	**Registration Number**	9235
Center		**Date**	

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

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

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

Plot No. 857, 1st Floor, Banda Bahadur Marg (Opp Punjab & Sindh Bank), Dr. 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) Land Over 30% of cases pending in courts relate to property disputes. The consequent impact on judicial efficiency, ease of doing business and productivity causes massive welfare costs. In this context, digitisation of land records is important.

Need

1) Massive discrepancies, inconsistencies among different data sources like sale deeds, record of rights etc.
2) Benami property - fuels corruption, impedes land reform, offers outlet for money laundering and organised crime
3) Property tax collections by urban local bodies are much below potential impeding governance
4) India ranks low in property registration metric of Ease of Doing Business - impedes growth, foreign investment
5) hinders long term urban planning and efficient zoning - causing urban sprawls, haphazard and hazardous construction
6) Judicial pendency causes inordinate delay in other important matters of criminal law and human rights

Challenges

1) legacy issues as land records date back to Mughal administration
2) Inefficiency, corruption, lack of skilled personnel in revenue administration.

3) Regulatory capture by vested interest groups. eg: Benami Property Rules were not notified for 20 years.

4) Technological limitations: Granular geospatial data was not publicly available until recently.

5) e-governance in silos - coordination issues among multiple state and central departments that have relevant data

The recent deregulation of geospatial data will catalyse innovation in land records management and unlock land as a pillar of India's economic growth.

2) The recent migrant crises during COVID-19 highlighted the precarious living conditions of India's migrants - over 120 million (Economic Survey)

The move to implement ~~to~~ nationally valid ration cards is to be called One Nation One Ration Card Scheme.

Benefits

1) Migrant labourers and their families ~~to~~ will have nutritional security
2) Digitisation of distribution will increase supply chain efficiency and plug leakages
3) empower beneficiaries against FPS shop owners who have been found to engage in corrupt practices

4) Improve management and utilisation of buffer stocks that are presently over 80mn of cereals.

5) ~~Increase economic~~ Enable mobility for better opportunities - research shows that labour mobility leads to higher growth

Challenges

1) coordination among Centre and State departments - harmonising digital infrastructure and procedures

2) centralised grievance redressal

3) Ensuring adequate supply to both out-of-state migrant and his family back home.

4) Providing migrants access to nutritious and culturally palatable options outside their state.

5) Splitting cost between migrant surplus and migrant deficient states.

6) Dynamic needs assessment and change in state-wise provision based on changing mobility patterns.

The process to compile national database of migrants should be quickly completed to enable identification and provision of portable ration-cards at the earliest

3. India boasts of the fourth largest railway network in the world with over 70,000 km of track length.

Challenges

1) High operating ratio close to 100% - leaves little room for capital investments to boost performance
2) declining modal share in both freight and passenger traffic
3) congested routes operating above capacity reduce speed.
4) Railway safety concerns - accidents
5) ~~cross subsidies~~ siloed operation of railway administration hinders integrated, long term planning.
6) land acquisition delays, project clearances like EIAs cause cost overruns, delay network expansion

To become a commercially viable entity

1) reduce level of cross-subsidisation of passenger fares with freight fares to boost competitiveness in freight traffic
2) completion of Dedicated Freight Corridors, implementing Roll-on-Roll-off scheme for trucks, financial incentives for bulk cargo.
3) Electrification of railway network and ~~switch~~ switch to solar power for saving fuel costs.

4) coordinate track development with Sagarmala project to unlock intermodal transport potential

5) lighter, fuel efficient coach design should be adopted.

6) Manpower rationalisation to reduce salary and pension bill.

7) use biotoilets as conventional toilets reduce track life due to corrosion

To become efficient public service provider

1) improve safety standards by adopting modern signalling system, conversion to broad gauge, use of LHB coaches.

2) increase speed of passenger trains to 160kmph (NITI Ayog)

3) modernise railway stations through PPP.

4) needs assessment and expansion of network to distant regions esp. northeast.

The recent move to allow private ownership and operation of rolling stock will enable increased efficiency and improved public service delivery.

4) Dalwai Committee's recommendation to transform farmers into agri-preneurs requires higher focus on agriculture marketing to boost productivity and incomes.

~~ISAM~~

Importance of agri-marketing

1) ~~demand be~~
1) awareness of market demand incentivises farmers to move to higher value crops like fruits
2) FPOs and contract farming unlock efficiencies through economies of scale - increasing income.
3) encourage primary processing and value addition - reduce post harvest losses (over 90,000cr) and gain higher prices
4) reduce fiscal pressure on government due to open ended procurement linked to MSP.
5) crop diversification linked to market demand and local agro-climatic conditions will improve sustainability.

ISAM is a Central Sector Scheme to strengthen agri-marketing in India:

1) Directorate of Marketing Intelligence at AgriMin will improve information availability
2) Formation of 10,000 FPOs in 5 years will increase market power of farmers - for better price realisation

3) eNAM and abolition of APMC monopoly will increase competition for farm products - more innovation in supply chain, higher prices

4) promotion of contract farming will increase value addition, provide income security

5) Investments in warehousing infrastructure, launch of eNWRs will allow credit access, prevent distress sales.

6) Promotion of futures and options trading in agri-commodities under NCDEX.

'White Revolution' heralded by Verghese Kurien -led - Amul was in effect a marketing revolution - with a cooperative structure to sell directly to consumers providing higher prices. Innovation in agri-marketing remains crucial to improve livelihood security and sustainability for nearly 50% Indians.

5) Participatory Irrigation Management is the practices where upstream and downstream users enter into agreements

5) Participatory Irrigation Management is the involvement of local bodies and communities in efficient and sustainable use of water resources for agriculture

Need

1) fast depleting groundwater reserves. over 200 areas declared critically exploited by CGWA.
2) climate change induced variability in rainfall patterns
3) over-irrigation leads to salinisation, reducing land productivity
4) Inter-state disputes over river sharing. are linked to agricultural use.
5) Water as public good is not priced at its market value. This creates externalities, with no disincentive against wastage
6) promote disaster management wrt floods

Mechanism of PIM

1) gram panchayats and gram sabhas are given responsibility for efficient allocation of water resources
2) water budgeting and accounting + audit at local level to identify errant users
3) financial incentives to encourage sound management

Constraints in implementing PIM

1) Easement Act provides exclusive rights to property owner to ~~underwater~~ use underground water resources.
2) lack of funds, functionaries with local bodies.
3) socio-economic divisions of caste, class, clan at threaten exclusion of marginalised communities.
4) Water is a state subject - each state has its own regulatory architecture
5) Regulatory capture by large landowners, vested interests

Way forward

1) Pilot projects for PIM should be launched at in multiple states.
2) NITI Ayog should catalyse competitive innovation in developing regionally ~~rele~~relevant PIM models.
3) Inter State Council platform should be used to build national consensus on PIM.

- The share of water transport (coastal shipping and inland waterways) is <2% of freight transport in India. Despite its cost and environmental benefits, it remains underutilised because:

1) lack of inter-modal connectivity with roads and railways
2) regulatory ossification - ship design, river depths not standardised preventing large scale operations
3) infrastructure like freight terminals not developed.
4) international borders with Bangladesh limited water connectivity with north-east
5) dominance of foreign ships in coastal shipping

Steps Taken

1) Over 100 National Waterway will be developed
2) NW-1 over Ganga nearing completion with launch of Multi-Modal Terminal at Varanasi.
3) Protocol on Inland Water Trade signed with Bangladesh.
4) Ship design standardised, river depths to be maintained to allow large displacement vessels.
5) Progress on interlinking of rivers eg. Ken-Betwa link.

6) incentives to Indian shippers to increase share of coastal shipping

The development of water transport will increase competitiveness of Indian exports by reducing logistics costs. It will boost the PM's vision of attaining $5tn economy.

7) Logistics costs in India range from 13-14% of GDP vs <8% (global average). Multiple factors constraining the sector cause persistently high costs:

1) delay in development of road and rail infrastructure: land acquisition, environmental clearances
2) siloed planning with limited intermodal connectivity
3) cost effective inland waterways not developed.
4) inter-state trade barriers esp. prior to GST
5) high fuel costs due to global prices and taxes
6) Indian ports failed to attract ~~transhipment~~ trans-shipment cargo due to lack of aherance to international standard.
7) technology and skills deficit - paper based approvals etc.
8) railways' declining share of freight - overburdened infrastructure and high prices.

Recommendations

1) Cargo specs should be standardised across all modes of transportation to minimise loading/unloading times.
2) integrated planning - unified Ministry of Transportation for unified and synergistic approach

3) Incentivise long distance truckers to adopt EVs + enabling infrastructure like charging points along highways (FAME-II)

4) Multimodal Terminals should be established eg: Varanasi

5) Prioritise development of inland waterways + coastal shipping.

6) Digitise approvals and compliances for inter-state and international trade.

7) Use geospatial data from NAVIC to develop efficient, integrated transport corridors.

The recent liberalisation of geospatial data and realisation of One Nation One Market through GST will catalyse innovation in logistics sector - making Indian industry more competitive, productive and sustainable.

8 India has 12 major ports and 205 minor ports that handle 90% of merchandise trade by volume. However the persistent inefficiencies have hamstrung India's effort to emerge as a trans-shipment hub along SLOCs.

Corporatised ports are ports managed by private parties based on a Model Concessionaire Agreement with government. ~~Ports run by pv~~

Benefits

1) Increase efficiency in operations through innovative business modes and processes.
2) deployment of state of the art technology like RFID sensors, handheld sensors to streamline operations.
3) higher capital availability for infra investment
4) skilled personnel with long experience in shipping vs beaurocrats who are generalists, frequently transferred
5) faster decision making based on sound commercial principles
6) Thus the recent move to corporatise atleast one major port will incentivise infra development and efficiency in shipping sector

9) India's power sector suffers from AT&C losses of over 20%. Smart metering has been suggested in this context - it is the deployment of pay-as-you-go meters in residential and commercial spaces that optimises for load variability, switching between multiple power distributors.

Rationale

1) prepaid payments reduce ~~arrear~~ arrears and collection expenditure
2) liberalisation of power distribution will require easy switching between providers to optimise cost.
3) more granular data on energy consumption will enable more targeted power sector policy making.
4) Prevent tampering of meters and theft of power.
5) promote grid stability by optimising for load variability and power generation across coal, solar, wind etc

Steps taken by govt

1) liberalisation of discom providers to increase choice for end consumers, incentivising smart metering
2) EESL and other agencies conduct R&D for quality, low cost design

10) Delays caused by land acquisition impede public infrastructure creation, private investment and growth potential of Indian economy. Land pooling is proposed in this context.

Land pooling is the assumption of ownership of irregularly sized plots to a central agency - which then divides the entire area into regularly shaped plots. Most of the acquired land is used for project development, while a fraction is transferred back to original owners in proportion to their original ownership.

Why it is effective & dependable

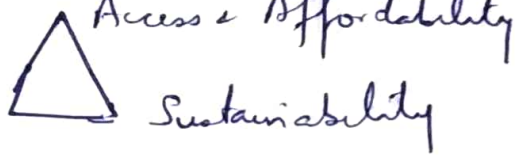
1) reduce land acquisition cost for government/private players.
2) make landowners stakeholders in project development - as their new regularly shaped plots benefit from increased value.
3) reduce displacement and resettlement
4) Land pooling can be used to create land banks - a reservoir of land for future development - attracting investment
5) reduced litigation and higher certainty boosts investor confidence
6) increases productive potential of land by resizing and rationalisation of plot shapes.
7) The successful land pooling model of Amravati can be adopted across India to improve ease of doing business.

3) financial and other benefits for deployment
4) Schemes like rooftop solar, Saubhagya Yojana provide for installation of smart meters.

Smart metering is a crucial cog in the wheel moving towards PM's vision of One World, One Grid - achieving seamless grid connectivity across nations.

11) India ~~ranks~~ consumes only ⅓rd of global energy consumption per-capita. This energy deficit directly correlates with poverty, lower growth and poor living standards.

An integrated energy policy seeks to optimise across all power sources to achieve the highest outcomes across energy triangle:



Achieve self-sufficiency

1) reduce foreign dependence (oil - 80%, gas - 45%)
2) maximise solar power potential due to India's tropical location
3) explore hydrogen economy for use in heavy industries.
4) standalone solar PV systems in remote areas beyond grid
5) incentivise exploration of oil and gas reserves — over 3.14mn sq. km of ~~as~~ area lies unexplored
6) ~~inc~~ incentivise faster production of natural gas through existing blocks.
7) long-term horizon planning for power infrastructure to avoid locking into foreign-dependent energy pathways.
8) petroleum reserves should be established and expanded to make use of low global prices to achieve atleast 90 days of security.

9) utilise biomass production for biogas and ethanol manufacture (for petroleum blending).
10) exploration of OTEC potential across vast coastline.
11) gas pipeline infrastructure like TAPI, through Bangladesh should be expeditiously implemented.
12) Naval capabilities should be bolstered to improve security of Indian assets across SLOCs.

(without compromising ecology)

1) reducing coal dependence by phasing out old Thermal PPs and limiting new development to avoid lock-in
2) Increasing biofuel share through higher blending norms.
3) improving efficiency of energy consumption - appliances, industries, automobiles etc: save fuel and carbon footprint.
4) higher carbon tax and innovative cap and trade schemes like expanding PAT scheme
5) rationalise hydropower development in ecologically fragile regions to avoid disasters like Uttarakhand floods.

Continuous innovation catalysed through incentives and regulations ~~can boost~~ must be the goal of an integrated energy policy.

12 The legacy of green revolution haunts India today because of the 'resource treadmill' phenomenon - increasing use of inputs, including water, to achieve stagnant or even declining output. States like Punjab and Haryana with little rice consumption contribute highest amounts to rice production - causing severe groundwater depletion.

In this context, irrigation water productivity ↑ - crop output per unit water used - is important than land productivity - crop output per unit land area.

Need

1) Crops grown are ill-suited to agro-climatic regions
   eg. Sugarcane in Vidarbha, Rice in Punjab.
2) India has <2% of world's freshwater resources that must satisfy 17% of population
3) India ranks among the highest net exporters ↑ of 'virtual water' - water used in production of exports.
4) CGWA: over 200 areas are critically depleted in groundwater.
5) over-use of water leads to salinisation, eutrophication and reduction of land productivity.
6) Irrigation water productivity highlights mismatch between natural water endowments and cropping system

6) Policy incentives like Payment for Ecosystem Services, economically priced water can be better designed based on irrigation water productivity

7) Financial and regulatory incentives for R&D and innovation in water-saving agricultural technologies

8) Irrigation water productivity highlights sustainability of agricultural operations – preserving land value for future

9) Incentives like free power can be evaluated better with regards to water consumption

10) Water consumption is an externality to agriculture - whose ecological cost is not included in price. Focus on water productivity will incentivise behaviour change.

NITI Ayog's Composite Water Index is thus a great initiative to rank states on factors including irrigation water productivity. Linking Finance Commission devolution to this index is important to promote good behaviour.

13) Mixed farming models that include crop and livestock production increase farmer incomes, reduce market dependence for inputs and boost sustainability of operations.

In this context, animal husbandry is important for:

1) Food Security:
   - Milk and milk products are important protein-source
   - Eggs and poultry consumption
   - Increasing meat consumption with rising incomes & western influence

2) Supplementing family income:
   - over 70% of workers involved are women
   - animal products are natural insurance against vagaries of weather and crop price variability.
   - products like cowdung are used as fertiliser, for biogas
   - crop residue after harvesting can be used as animal feed.
   - reduce market dependence for animal products.

3) Generating gainful employment:
   - employ households during lean season between sowing and harvesting of crops.
   - agri-marketing and processing like milk collection and distribution centres employ several people
   - Fertiliser, biogas and other products using animal waste provide alternate employment.

Challenges

1) low productivity of livestock due to poor genetics, low quality feed, diseases, poor management practices.
2) insufficient storage and processing infra causes wastage
3) fake news about zoonotic virus threats. e.g: mutual covid fears caused large fall in egg and chicken consumption
4) restrictions on movement due to recent cow-protection acts and law and order issues.
5) climate change causing weather variability impacts productivity
6) Technical Barriers to Trade placed on Indian animal and marine exports.
7) lack of integration with global supply chains due to quality and marketing challenges.
8) limited skilled personnel in veterinary care.

Way Forward

1) Breed improvement programs like Rashtriya Gokul Mission.
2) improved disease surveillance, vaccination & treatments
3) investments in ~~agri~~ supply chain to connect with global markets.

14 India's high post harvest losses (over 90,000cr) and low value addition in agriculture can be addressed by a vibrant food processing sector.

Problems

1) Low investments and poor enabling infrastructure like reliable connectivity and electricity in rural areas
2) 85% of farmers are small and marginal - increase transaction costs for industries
3) seasonality of operations impacts commercial viability
4) Crop varieties grown are unsuited to processing
5) High cost of power, unreliable supply in rural areas
6) Technical Barriers to Trade to Indian exports
   e.g. Mangoes to Europe
7) lack of intermodal connectivity for fresh produce like fruits, vegetables
8) marketing restrictions - export limit, APMC monopoly, barriers across states, stockholding limits
9) access to formal credit for infrastructure

PM Kisan SAMPADA Yojana seeks to address these problems in the following ways:

1) establish Mega Food Parks to enable economies of scale

2) Hub and spoke model: MFPs connected to collection and primary processing centres

3) 10,000 FPOs to be formed over 5 years with financial and training support to enable aggregation

4) Contract Farming promotion ~~th~~ by harmonised regulations.

5) Subsidised loans from NABARD and SIDBI to setup processing infrastructure.

6) standardised label and certification labs to boost exports

7) Farm-gate infrastructure improved through Gramin Agri. Markets and APMC infrastructure modernisation

8) removal of APMC monopoly, marketing restructuring, development of eNAM.

Higher focus on food processing with market linkages is important to transform farmers into agri-preneurs, ensuring both food and livelihood security.

15 The food and fertiliser subsidy bill is the largest welfare expenditure undertaken by govt. in a financial year. But capital investment in agriculture languishes at <2% of agri-GDP, leading to declining productivity.

In this context, prioritising capital investments over subsidies is important.

1) outdated machinery, crop varieties, seeds, fertilisers lower crop yield and income.
2) India's per-hectare yields are a fraction of developed countries, and even China – which also has smallholder agriculture.
3) Storage and processing infrastructure is important to prevent post-harvest losses and increase value addition.
4) lack of enabling infra (connectivity, reliable power) impedes private investment.
5) chronic underemployment in agriculture because of low productivity of operations

However, ~~not~~ subsidies remain important.

1) Assured procurement at MSP protects farmers from market uncertainty.
2) FCI procurement ensures buffers stocks for food security
3) Fertiliser subsidy reduces input cost, increases incomes.

Way forward

1) Increased share of long term capital investments in agri-PSL.
2) rationalise urea subsidy no nutrient based approach
3) More to price deficiency payment models like PM AASHA Yojana as vs MSP procurement - save operational cost
4) Increase R&D expenditure, improve research culture at agri-universities
5) simplify and reduce regulatory burden like marketing restrictions, licensing norms to attract private capital
6) innovative sharing models like Custom Hiring Centres
7) international partnerships for skill development and tech transfer
8) innovative financing mechanism like Viability Gap Funding, Asset Monetisation, ETFs etc
9) plug leakages in subsidies transfer - use cost savings to fund capital investment.
10) improve PRI financial and technical capability to undertake locally relevant investment - ponds, roads, power etc

The vision of doubling farmers' income (Dalwai committee) requires capital investments to increase productivity and sustainability of agriculture.

16 Low seed replacement rate and Varietal Replacement Rate in India are seen as major drag on India's agricultural productivity despite resource intensive practices in water, fertiliser and pesticide use. Farmers continue to use farm-saved seeds, with declining returns.

In this context, following concerns exist in availability of quality seeds & affordable prices:

1) counterfeit seeds with high non-germination rate and low yields sold in market
2) MNC monopoly on certain varieties of HYV, GM seeds (like BT-cotton) leads to increasing prices
3) criminalisation and prosecution of use of patented seeds across seasons (Lays took Gujarat potato farmers to court)
4) lack of adequate testing and certification infrastructure to remove and prosecute sub-par varieties.
5) declining quantity and quality of research output in India esp at State Agriculture Universities
6) threat of GM seeds causing adverse health and ecological effects
7) MNCs exploit traditional knowledge of farmers and patent seed varieties that have been developed by communities over generations.

Interventions required

1) Robust regulatory architecture and enforcement to ensure only certified, quality seeds are available in market
2) incentivise higher SRR and VRR through dedicated loans, subsidies, agri-extension programs
3) resist evergreening of seed varieties by MNCs, check exploitative royalties payments
4) boost public R&D in seed varieties to develop climate & pest resistant seeds esp in context of climate change
5) an evolve farmer friendly jurisprudence on ~~farmer~~ IPR issues
6) Promote FPO formation, contract farming to aggregate distribution of quality seeds through ~~farmer~~ formal channels.
7) digitise and ~~eg~~ organise traditional knowledge of indigenous communities to challenge patents derived from local peoples
8) Seed varieties developed by farmers should be patented hassle-free to incentivise knowledge production bottom-up.
9) Maintain national cropping database to evaluate seeds use and productivity to identify areas for immediate action

A robust, skilled, adequately resourced public seeds regulatory architecture is important to pull farming out of low-level equilibrium of stagnant yields

17) India's agricultural exports stand at $30bn with the Agro-Export Policy target of $100bn in 5 years.

Scenario

1) low value addition in exports - mostly raw materials
2) rice (esp basmati), meat, fisheries are the highest items.

Supply Side Issues

1) Lack of market linked production of crops & crops varieties
2) poor storage and processing infrastructure causing high post harvest losses (>90,000 cr p.a.) esp of high value crops.
3) lack adequate testing, certification and branding infrastructure
4) policy focus on food security instead of income security leads to sub optimal cropping system
5) low productivity due to low mechanisation, smallholder dominance, lack of R&D, leads to high cost and prices.
6) Developed countries offer income support to farmers effectively subsidising exports.
7) high logistics costs due to lack of intermodal connectivity esp from northern plains to the ports
8) agri-marketing restrictions like APMC monopoly, minimum export price, stockholding limits impede private investment and innovation.

Demand side issues:

1) Non-tariff barriers like Sanitary & Phytosanitary standards
2) Volatile consumer preferences make export markets unpredictable
3) Trend of food deficit nations like China, UAE etc leasing out large farms in Africa, reducing import demand

Way Forward

1) Directorate of Marketing Intelligence within Ministry for real time tracking of export demand (Dalwai committee)
2) Invest in food processing and agri-logistics to improve value addition, reduce wastage
3) Robust testing infrastructure to ensure export-worthy quality control and certification

The Agricultural Export Policy's target of $100bn export (present of $30bn) is excellent lodestar to transform agriculture's income potential

18) The dismal state of India's infrastructure is reflected in the fact that logistics cost around 14% of GDP vs 7-8% for major nations like US, China. This makes exports uncompetitive, reduces income and impedes poverty alleviation

In this context, National Infrastructure Pipeline - 102 lakh crore of infrastructure projects - fulfils multiple development goals.

Features

1) covers all infrastructure sectors like roadways, railways, housing, waterways etc.
2) emphasis on multi-modal connectivity, esp reducing roadways share of 60% of freight.
3) financing through PPP, alternate monetisation strategies like Investment Infrastructure Trusts, municipal bonds etc.
4) horizontal and vertical inter-agency coordination - focus on cooperative federalism for quick execution.
5) Project Development Cells in each ministry for monitoring and single window approvals.
6) Cabinet Committee on Investment and Growth has been formed for speedy approvals.

Significance

for economic growth:

1) increase competitiveness of exports - boost incomes
2) fulfil Atmanirbhar Bharat vision of self reliance in core sectors.
3) unlock labour productivity for higher output
4) infrastructure has huge multiplier effect - due to backward and forward linkages

for poverty alleviation

1) infrastructure, esp. construction, is labour intensive - boost incomes of the poor. experienced in 2004-08.
2) Increased exports will provide quality employment - regular, salaried, with growth potential (Economic Survey)
3) Infrastructure like affordable housing, transport, hospitals directly improve quality of life and productivity.

A holistic approach addressing red tape, multiple clearances, cost of credit, twin balance sheet crisis ~~are~~ is important to fulfil NIP's objectives

19 Urban India is expected to be 40% of India's land and account for 65% of GDP by 2030. The higher rate of economic activity and income make urbanisation essential to meet our development targets

To achieve faster urbanisation, increasing the supply of urban land is a priority because:

1) housing crisis: proliferation of slums in absence of affordable dwellings for migrants
2) overburdened infrastructure like roads, water and sewage pipelines, old buildings
3) high cost of land impedes economic activity, startups and innovation - reinforcing low productivity trap.
4) high population density causes road congestion, haphazard construction, poor quality of life.

5) Issues with increasing supply:

1) archaic land use regulations and opaque, complicated procedures for land use change.

2) Messy land records administration - lack of clear ownership titles, impede transactions

3) food security concerns limit use of agricultural land

4) illegal encroachment and land mafia with political patronage

5) State governments avoid notification as urban areas to minimise local administrative autonomy.

Measures

1) digitisation and rationalisation of land records.

2) Finance Commission should tie grants to states with granting statutory recognition to Census towns.

3) ease floor area ratio restrictions to allow innovation in vertical construction

4) land reclamation - wastelands, coastal areas

5) innovations like land pooling to minimise acquisition costs.

Urbanisation is often accompanied by higher economic growth and material prosperity, but only if it is planned and deliberate. Thus, land governance must move towards increasing urban land supply.

20) Producer Organisations are provided in Companies Act 2013 to allow for broad-based ownership of corporations by agriculturalists.

Need

1) Small landholding size (average 1 ha/farmer) prevents economies of scale, causes low productivity.
2) Poor bargaining power in the market allows exploitation by middlemen.
3) high transaction cost in marketing of produce leads to low value addition, income.
~~4) lower levels of capital~~
4) inadequate capital investments like mechanisation, drip & sprinkler irrigation etc.
5) poor state of extension services prevents farmers from using latest science & technology.
6) high climate and market risks can be mitigated through support of FPOs.
7) individual farmers lack information, skill or time to navigate complex supply chains.

Measures:

1) On Dalwai committee's reco, 10,000 FPOs will be formed in next 5 years with NABARD assistance.
2) PM Sampada Yojana to promote food processing offers special incentives for FPOs.
3) Provision of cheap credit through priority lending norms

Challenges to be addressed

1) Robust governance through capacity building, independent external audits, preventing interest group capture.
2) Increase awareness and interest among farmers.
~~3) regular sharing of best~~.
3) lack of adequate capital ~~or~~ and access to credit.
4) lack of supply chain linkages, esp with export markets
5) poor state of processing and storage infrastructure.

Through dedicated policy support for bottlenecks, FPOs can become crucial in transforming farmers into agripreneurs (Dalwai committee)