Science & Technology · GS - III

Elaborate the scope and significance of supply chain management of agricultural commodities in India.

EXAM YEAR	PAPER	SUBJECT
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MARKS	WORD LIMIT
10	~150 words

Answer Hint

Farm-to-market, aggregation, storage, cold chain, logistics, processing, e-NAM, FPOs, post-harvest losses, price discovery, food security

Model Answer

Introduction

Agricultural supply chain management encompasses the movement of produce from farm inputs and production through aggregation, storage, processing, transportation and final consumption.

1. Scope

It includes:

1. Farm-level aggregation through FPOs and cooperatives.
2. Scientific warehousing and cold-chain infrastructure.
3. Grading, standardisation and packaging.
4. Efficient transportation and logistics.
5. Food processing and value addition.
6. Digital marketplaces and traceability.
7. Export-oriented quality and certification systems.

2. Significance

Efficient supply chains reduce post-harvest losses and enable farmers to access distant and remunerative markets. Better storage allows farmers to avoid distress sales, while processing increases value addition and employment.

Digital platforms such as e-NAM can improve price discovery and market integration. Cold chains are particularly important for horticultural and dairy products.

Integrated supply chains also strengthen food security by improving availability and reducing wastage.

3. Challenges

Fragmented holdings, inadequate cold storage, poor rural roads, multiple intermediaries, information asymmetry and weak processing capacity continue to constrain efficiency.

Conclusion

Modern agricultural supply chains can transform Indian agriculture from production-oriented farming to market-oriented value chains. FPOs, logistics infrastructure, digital platforms and food processing should therefore be developed as an integrated ecosystem.

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