Q4

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

UPSC Civil Services Mains 2025 · GS III · 10 marks · Indian Economy

Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

Core demand of the question

- Define agricultural supply-chain management from farm to fork
- **Show scope:** storage, logistics, processing, retail, information
- Show significance for farmer price, food inflation, waste, exports

Revision summary

Supply-chain management covers grading, storage, transport, processing, retail and information from farm to fork.

India still loses a large share of fruit and vegetable value to weak cold chains.

A working chain raises farm-gate share, cuts waste, and can ease food inflation.

It is also the backbone of agri-exports and of jobs in packing and mills.

Without it a bumper crop becomes a price crash.

Introduction

A crop is not income until it **reaches a mouth or a mill** at a price that leaves something for the grower. **Supply chain management** of farm goods is the craft of that journey: harvest, grade, store, move, process, sell - with information running the other way. In India the chain is still leaky. That leak is both a farmer's wound and a consumer's inflation.

Body

Scope

The chain starts with **seed and advice**, but the question's usual core is **post-harvest**. **Storage** (warehouse, cold store, silo) decides whether a tomato is a vegetable or waste. **Transport** - village road, rail, reefer truck - decides whether a grape still looks like a grape in Mumbai. **Processing** turns cane to sugar and milk to powder. **Retail and e-commerce** set the last price. **Standards and traceability** decide export. **Information** (e-NAM, boards, WhatsApp prices) is the nervous system. FPOs and aggregators sit in the middle so a smallholder is not alone against a mandi cartel.

India's cold-chain capacity has grown but remains **short and uneven**. Food-loss studies still put **high waste** on fruits and vegetables. Cereals now have more silo and FCI cover, yet quality and local leakages remain.

Significance

For the **farmer**, a managed chain can cut the **gap between farm-gate and retail**. For the **consumer**, it can blunt seasonal **food inflation** that still dominates the poor's CPI basket. For the **country**, it supports **exports** (marine, spices, rice, buffalo meat, grapes) and **jobs** in packing and processing. For **nutrition**, a cold chain can carry milk and vegetables, not only wheat.

Without management, a bumper harvest is a **price crash**, which is the cruel Indian joke. Operation Greens, mega food parks, and PMKSY logistics are attempts to write a less cruel joke. Significance is therefore not a corporate buzzword. It is **whether a surplus feeds people or rot**.

Flow diagram

Farm -> Store grade

Store grade -> Transport

Transport -> Process

Process -> Retail export

Information e-NAM -> Farm

Information e-NAM -> Retail export

Conclusion

- **Agricultural supply-chain management is the path from field to plate:** store, move, process, inform. Its scope is the whole post-harvest system. Its significance is farmer income, less waste, steadier food prices and export quality.

Facts & figures

e-NAM
The electronic national agriculture market, meant to share price information and, in theory, buyers across mandis.

Cold chain gap
India has expanded cold stores, but capacity is still thin relative to horticulture output and is uneven by State.

Food inflation weight
Food still carries a large weight in the CPI of the poor, so a broken vegetable chain is a macro problem.