Q4

Examine the role of supermarkets in supply chain management of fruits, vegetables and food items. How do they eliminate number of intermediaries? (150 Words, 10 Marks).

UPSC Civil Services Mains 2018 · 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

- Examine how supermarkets organise the fruit, vegetable and food supply chain
- Explain how that model cuts the number of intermediaries
- Note risks for small farmers and kirana trade

Revision summary

Unorganised produce chains use several intermediaries between farm and plate, which adds margin and spoilage.

Supermarkets shorten the chain with collection centres, contracts, pack-houses and cold logistics.

Direct offtake and store distribution drop arhatiya and wholesale hops.

FDI in food retail and organised grocery were meant to finance that logistics.

Small farmers still need FPOs and a mandi fallback when quality rejection is high.

Introduction

Fruits, vegetables and packaged food in India still often travel through a **long mandi chain**: aggregator, arhatiya, wholesaler, transporter, then retailer. **Supermarkets** - organised grocery chains with collection centres and private standards - try to shorten that chain. They buy closer to the farm, grade and cold-store, and sell under one roof. Fewer hands can mean **less wastage and a clearer price**, if the contract is fair.

Body

Role in supply chain management

- **A supermarket runs** backward integration**:** collection centres, contract or registered growers, pack-houses, refrigerated trucks, and store-level inventory software.
- **Grading, washing, packing and cold chain** reduce the 20-40 per cent physical loss typical of unorganised horticulture after harvest.
- Private quality specs (size, residue, shelf life) force a **planned harvest**, not only a dump at the APMC gate.
- For staples and processed food, chains use **distribution centres** and direct deals with millers and brands, cutting wholesale layers.

- **100 per cent FDI in food retail** (subject to conditions from 2016) and organised domestic retail were meant to bring this logistics capital into perishables.
- Some chains also feed **export and institutional** buyers from the same pack-house, spreading fixed cold-chain cost.

How intermediaries are eliminated

- The classic chain is farmer to village buyer to **APMC commission agent** to urban wholesaler to push-cart or kirana. Each layer takes a margin and delays the truck.
- A supermarket **collection centre** can buy at the farm gate or a rural hub, so the arhatiya and one wholesale hop drop out.
- **Contract farming** and registered suppliers replace daily auction middlemen with a scheduled offtake.
- Direct store delivery from a pack-house to the shelf replaces a second city wholesaler.
- Electronic billing and **traceability** reduce the need for informal brokers who lived on information gaps.
- The farmer's share of the consumer rupee can rise **if** the chain does not capture the whole saving as its own margin.

Caveats

- Rejection on quality can throw produce back to the mandi, so the farmer still needs the old chain as **insurance**.
- Smallholders without scale, irrigation or grading lose the supermarket door unless **Farmer Producer Organisations** aggregate.
- Kirana and mandi labour lose volume; policy must not pretend the social cost is zero.
- **APMC and stocking rules** still shape whether a chain can legally buy outside the yard in every State.

Flow diagram

Farmer -> Old chain many intermediaries

Farmer -> Supermarket collection centre

Supermarket collection centre -> Pack house cold chain

Pack house cold chain -> Retail shelf

Old chain many intermediaries -> Waste and extra margins

Retail shelf -> Fewer hops less waste

Conclusion

Supermarkets manage fruit, vegetable and food flows with collection centres, cold chain and store demand data. That cuts village and mandi intermediaries and can cut waste. The farmer gains only if price, offtake and quality rules are transparent, and if FPOs give small plots a door into the same chain.

Facts & figures

APMC chain

Typical path: farmer, village aggregator, mandi commission agent, urban wholesaler, then retailer; each hop takes time and margin.

Collection centre

Rural or peri-urban supermarket hub that grades and buys produce closer to the farm than the terminal market.

Cold chain

Pack-houses, reefer transport and store refrigeration that slow spoilage of fruits, vegetables and dairy.

FDI in food retail

Union policy from 2016 allowed 100 per cent FDI in food retail trading of food products manufactured or produced in India, with conditions.

FPO

Farmer Producer Organisation: aggregator so smallholders can meet supermarket volume and quality specs.