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The Middleman Gap in Indian Agri Supply Chains

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Abstract

Farmers and urban consumers often have sharply different views of vegetable prices: growers may receive too little, while buyers may feel they are paying too much. This paper examines why that difference arises by reviewing published Indian research on the share of the consumer's payment that reaches producers, the factors that reduce this share, and possible solutions. The available evidence shows considerable variation across commodities and marketing channels. In a national survey, farmers received between less than one-third and nearly four-fifths of the consumer rupee, while some short channels yielded shares close to 90%.

Extended marketing chains, inadequate storage, and limited farmer bargaining power tend to reduce producer returns, particularly for perishable goods. Farmer Producer Organisations (FPOs) have shown encouraging results, whereas evidence on electronic markets such as e-NAM remains mixed. The paper concludes with practical implications for agribusiness managers seeking to develop supply chains that are both efficient and equitable.

Keywords: Price spread, agricultural marketing, Farmer Producer Organisations (FPOs), e-NAM, post-harvest losses, cold chain.

Introduction

A common scene in an Indian vegetable market illustrates a persistent problem in agricultural marketing. A consumer may complain that potato prices are too high, while a farmer in a distant village may report that the price received barely covers harvesting and transport costs. Both observations can be true at the same time. The difference between the farmer's realisation and the consumer's payment is a central issue in agricultural marketing and an important concern for agribusiness management.

Two concepts help explain this difference. Price spread refers to the difference between the price paid by consumers and the price received by farmers for the same quantity of produce (Kalia et al., 2021). The producer's share in the consumer rupee expresses the farmer's price as a percentage of the final consumer price (Maurya et al., 2017). A higher producer's share indicates that a larger portion of consumer spending reaches the farm level.

How Large Is the Gap?

There is no single estimate of the farmer's share across Indian agriculture, because it varies by commodity, location, season, and marketing channel. A nationwide survey of farmers, traders, and retailers, conducted in December 2018 and published in the Reserve Bank of India Bulletin, examined 16 major food items. It found that farmers received approximately 28% to 78% of the consumer rupee, depending on the commodity (Bhoi et al., 2019).

Earlier government estimates cited in the same publication indicated that farmers received 32% to 68% of the consumer rupee for fruits and vegetables, compared with 40% to 89% for less perishable commodities such as paddy, wheat, pulses, and oilseeds (Bhoi et al., 2019, citing Government of India, 2013). This pattern reflects an important distinction: storable crops allow farmers greater flexibility in timing their sales, whereas highly perishable produce often must be sold quickly, even at unfavourable prices.

Evidence from smaller regional studies supports this pattern. In a study of capsicum marketing in the Kandaghat block of Solan district, Himachal Pradesh, farmers received an average producer's share of

about 66%. The authors associated this relatively low return with the perishability of the crop (Kalia et al., 2021).

Every Additional Link Has a Cost

A study of groundnut marketing in Gorakhpur district, eastern Uttar Pradesh, illustrates how marketing-channel length can affect producer returns. Maurya et al. (2017) surveyed 100 farmers and compared three channels: direct sale, sale through a wholesaler and retailer, and a longer channel involving a village trader in addition to a wholesaler and retailer.

The farmer's share declined from approximately 97.9% in direct sales to 83.1% in the two-intermediary channel and 80.8% in the three-intermediary channel. Marketing costs increased from about 2.1% to 6.2% and then 6.7%, while middlemen's margins were approximately 12.5% in the two longer channels (Maurya et al., 2017).

These findings should not be interpreted as proof that intermediaries are always harmful. Traders may perform useful functions, including transportation, risk-bearing, aggregation, and provision of credit or immediate payment. The relevant management question is whether each intermediary adds sufficient value to justify its margin. A village trader who reduces the farmer's travel burden and offers prompt payment may provide a valuable service. In contrast, an intermediary that exists mainly because farmers lack alternative buyers may impose an avoidable cost on producers.

The opposite situation is also possible. A study of smallholder dairy farmers reported a producer's share of approximately 91.6% in the group examined (Shabana et al., 2022). This suggests that shorter, better-organised channels can allow farmers to retain a much larger portion of the consumer rupee.

Inadequate Storage Facilities

Storage constraints are a major but often overlooked cause of low producer returns. An assessment by ICAR-CIPHET, India's post-harvest engineering institute, estimated cumulative harvest and post-harvest losses of 4.58% to 15.88% for fruits and vegetables and approximately 4.65% to 5.99% for cereals (Government of India, 2022; ICAR-CIPHET, n.d.). A later assessment reported in The Tribune estimated losses of 15.05% for guava and 11.61% for tomato, although it also noted that several crops showed lower losses than in the 2014–15 assessment (The Tribune, n.d.).

Losses affect not only the quantity sold but also the farmer's bargaining position. When produce deteriorates rapidly and cold-storage facilities are unavailable, farmers may be compelled to sell immediately, to whichever buyer is available, and at whatever price is offered. Cold-chain infrastructure can reduce this pressure by enabling seasonal produce to be stored and distributed over a longer period (ICAR-CIPHET, n.d.).

Government support for cold-chain development is available through a Ministry of Food Processing Industries scheme open to individuals, cooperatives, self-help groups, and FPOs (Government of India, 2022). Nevertheless, infrastructure gaps persist. A case study of Bhatapara market in Chhattisgarh found that the market had no cold-storage facility (Bachaspati & Pathak, 2018).

Selling Together: The FPO Advantage

Individual farmers often have limited bargaining power, but collective marketing can improve their position. A study in Kurnool district, Andhra Pradesh, compared farmers selling through FPOs with those selling independently. FPO members used shorter marketing channels and experienced lower price spreads. Their producer's share was 88.96% compared with 85.41% for non-members in cotton, 82.71% compared with 77.86% in groundnut, and 78.40% compared with 70.19% in red gram (Shabana et al., 2022). Although gains of three to eight percentage points may appear modest, they can be meaningful for smallholders selling limited quantities. The broader lesson is that FPOs can shorten the marketing chain while retaining useful services such as aggregation, transport, quality grading, and market linkage.

Digital Markets: Promise and Caution

The electronic National Agriculture Market, or e-NAM, was launched on 14 April 2016 to connect regulated mandis digitally and improve price discovery (Bachaspati & Pathak, 2018). Research on its effects has produced mixed findings.

A study of regulated markets in Rajasthan, using a difference-in-differences approach, found increases in farmers' prices or marketed quantities after e-trading was introduced, although survey evidence indicated scope for further efficiency improvements (Swain et al., 2022). A case study of Sirsa market in Haryana, covering 2011–12 to 2020–21, concluded that e-NAM had a positive overall effect on arrivals and prices (Singh et al., 2023).

Others research is more cautious. A working paper from IIM Kozhikode, combining qualitative and quantitative evidence, concluded that digitisation created difficulties for some farmers and did not consistently deliver remunerative prices (Jayanth Reddy et al., 2022). These findings suggest that digital platforms are tools rather than complete solutions. Without nearby storage, grading facilities, digital literacy, and farmer trust, online markets may simply relocate existing marketing problems to a digital platform.



Role of Agribusiness Managers

- ❖ Calculate the producer's share for each commodity and marketing channel to identify where value is being lost.
- ❖ Map the supply chain and assess whether each intermediary performs a necessary value-adding function.
- ❖ Treat storage and cold-chain investment as pricing tools, not merely as costs, because the ability to hold produce can improve bargaining power.
- ❖ Support farmer collectives, since FPO-based marketing can raise producer returns even when the crop and market remain unchanged.
- ❖ Adopt digital platforms realistically, ensuring that infrastructure, awareness, and trust are in place before expecting strong results.

Conclusion

The gap between the farm gate and the retail market is real, but it cannot be explained by a single cause or attributed to one group alone. It results from multiple stages of handling, transport, storage, risk-taking, and trading, each of which carries costs and margins. The evidence reviewed here indicates that producer shares decline as chains become longer, that perishability and poor storage worsen the problem, and that collective marketing can recover part of the loss. Digital markets have helped in some settings but have not been uniformly successful.

For students and professionals in agribusiness management, this is an actionable problem. Shorter channels, improved storage, stronger farmer organisations, and carefully implemented technology can reduce avoidable costs and improve farmer returns. When consumers question high vegetable prices, the more useful question is not simply who is responsible, but which part of the supply chain can be made more efficient.



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