



Agri Supply Chain: Reducing Middlemen and Increasing Farmer Profit

*Anand Siramdas¹ and B Bhanukiran Reddy²

¹MBA Agribusiness Management, School of Agribusiness Management, College of Agriculture, PJTSAU, Rajendra Nagar, Hyderabad

²Department of Soil Science and Agricultural Chemistry, Tamil Nadu Agricultural University, Coimbatore-641003

*Corresponding Author's email: anandsiramdas54@gmail.com

Agricultural supply chains are often elongated by multiple layers of intermediaries, contributing to significant value loss and reduced income for farmers. This article critically examines the role of middlemen in agricultural marketing, exploring how their dominance affects farmer profits and consumer prices. It presents innovative solutions, including farmer producer organizations (FPOs), direct marketing platforms, digital technologies like blockchain and eNAM, contract farming and policy frameworks designed to streamline supply chains, reduce intermediary exploitation and enhance farmer welfare. The article draws on global evidence, regional case studies and the latest technological developments to propose a roadmap for building fair, efficient and profitable agri supply chains.

Keywords: Agricultural supply chains, middlemen, farmer profits, market access, FPOs, digital agriculture and contract farming

Introduction

Farmers worldwide face a paradox where increasing food demand contrasts with chronically low farm-gate prices (Drishti IAS, 2024). Middlemen or intermediaries dominate many agri-supply chains, extracting large profit margins by purchasing low from producers and selling high to consumers, often offering little transparency or market information (International Journal of Agricultural Extension, 2024). For example, farmers receive only 65-75% of the final consumer price for pulses like gram, moong and tur, while multiple intermediaries take excessive shares. Such unequal profit distribution exacerbates rural poverty, disincentivizes investment in quality and encourages inefficient market practices (RBI Report, 2024). The challenge is to redesign agricultural value chains to minimize unnecessary intermediaries, promote farmer empowerment and enhance supply chain transparency without compromising logistical efficiency (Poverty Action Lab, 2025).

The Structure of Agricultural Supply Chains and Role of Middlemen

Modern agricultural supply chains involve steps like input supply, production, aggregation, transport, processing, wholesaling, retailing and consumption (FAO, 2019). Middlemen operate at many stages, including commission agents, traders, brokers and exporters.

Functions and Disadvantages of Intermediaries

- **Functions:** Middlemen absorb risks such as crop failure or price volatility, provide credit and offer logistical services.

- **Disadvantages:** They often capitalize on asymmetric information, wielding market power to suppress farm-gate prices; additionally, multiple layers delay payment and increase transaction costs for farmers (Drishti IAS, 2024).

Profit Distribution in Supply Chains

Data indicate intermediaries capture up to 80% of final value in many chains, with farmers often earning a minority share. This skewed distribution perpetuates rural income inequalities and diminishes incentives for quality and diversification (FAO, 2019).

Reducing Middlemen: Strategies for Increasing Farmer Profit

Strengthening Farmer Producer Organizations (FPOs)

FPOs enable collective bargaining power, bulk aggregation and direct market access. Studies across India show FPO-led farmers reported 10-20% higher prices due to better negotiation and reduced transaction costs (NABARD, 2024). FPOs also provide technical support and enable quality certification, further enhancing marketability.

Direct-to-Consumer Models and Farmer Markets

Direct sales through farmer markets, farm shops and community-supported agriculture models eliminate intermediaries completely, allowing farmers to retain nearly all value (Sustainable Agriculture Eco, 2024). Digital platforms can amplify reach, connecting local producers to wider urban markets and enabling better price discovery (Poverty Action Lab, 2025).

Digital Marketplaces and eNAM (Electronic National Agriculture Market)

India's eNAM integrates more than 1,000 mandis into an online platform, increasing transparency and competition among traders nationwide. Studies attribute up to a 10-15% increase in prices to farmers due to reduced collusion and widened buyer networks (CCSNIAM, 2020).

Contract Farming

In contract farming, farmers pre-agree with buyers on quantity, quality and price, reducing market risks and enabling targeted production (Poverty Action Lab, 2025). Contract arrangements foster investments in productivity-enhancing inputs and technology adoption, increasing overall incomes.

Technology as a Catalyst: Blockchain, IoT and Machine Learning

Emerging technologies play a vital role in reducing inefficiencies and middlemen influence:

- **Blockchain:** Provides immutable transaction records and traceability, assuring consumers of provenance and fair payment to farmers (Farmonaut, 2025).
- **IoT:** Sensors monitor soil and crop health, enabling precision agriculture and reducing risks (Staragri, 2025).
- **AI-powered price forecasting:** Enables dynamic pricing and matching supply-demand efficiently (ETEdge Insights, 2023).

Case Studies

Digital Supply Chain Transformation in Uganda

A digital platform connecting maize farmers with traders via SMS price alerts increased rural incomes by 2.8% by reducing price deviations and improving market transparency (Poverty Action Lab, 2025).

Indian Dairy Cooperatives

Cooperatives like Amul succeeded by aggregating milk, standardizing quality and marketing directly, increasing farmer incomes and improving food safety (PIB, 2024).

Policy and Institutional Frameworks

Cross-sectoral policies are essential, including:

- Investment in rural infrastructure (roads, storage).
- Credit and insurance to reduce farmer risks.
- Support mechanisms for collective marketing.

- Regulatory reforms promoting market competition (Drishti IAS, 2024).

Challenges and Mitigation

- Resistance from entrenched middlemen.
- Limited farmer awareness and literacy.
- Infrastructure deficits.
- Technology access and digital divide.

Addressing these requires integrated government, private sector and civil society efforts (NABARD, 2024).

Conclusion

Reforming agricultural supply chains by reducing middlemen holds vast potential for improving farmer incomes and ensuring food security. Combining FPO empowerment, digital tools, direct marketing and supportive policy frameworks creates inclusive, efficient markets where farmers earn fair profits, quality produce reaches consumers and sustainable rural development is realized.

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