



Effectiveness of e-NAM in Improving Market Access and Price Realization

*Shubham Panwar, Medha Singh, Rohit Kumar Nihar Ranjan Dehury and Ashirvad Chandra Shekhar Azad University of Agriculture and Technology,
Kanpur-208002, Uttar Pradesh, India

*Corresponding Author's email: 572shubhampanwar@gmail.com

The electronic National Agriculture Market (e-NAM) is one of India's most significant market reforms aimed at integrating agricultural markets through digital platforms. By promoting transparency, competition, and wider market access, e-NAM seeks to enhance farmers' price realization and reduce the influence of intermediaries. This research article evaluates the effectiveness of e-NAM in improving market access, price discovery, and income prospects for farmers. It also identifies challenges and provides recommendations for strengthening the platform.

Introduction

Agricultural marketing in India has long been constrained by fragmented markets, high transaction costs, and limited access to distant buyers. The traditional mandi system often restricts farmers to local traders, leading to low bargaining power and unstable prices. To overcome these challenges, the Government of India launched e-NAM (National Agriculture Market) in 2016 as a pan-India electronic trading portal connecting physical markets through a unified online platform. The primary objective of e-NAM is to facilitate transparent, competitive, and efficient agricultural marketing by enabling farmers to access multiple buyers, real-time price information, quality testing services, and digital payments. This study assesses whether e-NAM has been effective in improving market access and price realization for farmers across India.

e-NAM as a Digital Market Reform

e-NAM integrates physical APMC mandis into a single digital trading portal. The platform allows:

- Online bidding and transparent auctions
- Real-time price updates across markets
- Quality testing of produce using e-NAM labs
- Unified licensing for traders
- Electronic payments directly to farmers' bank accounts

These features reduce transaction costs, increase competition, and expand market opportunities for farmers.

Improving Market Access Through e-NAM

Wider Buyer Network

Before e-NAM, farmers were restricted to local mandis and a limited number of traders. e-NAM connects farmers to:

- Buyers from other districts
- Buyers from other states
- Farmer Producer Organizations (FPOs)

- Large-scale aggregators and processors

This expansion enhances market access, particularly for farmers in remote and low-income regions.

Reduction of Middlemen Influence

Traditional markets involve multiple intermediaries who often capture a large share of the consumer price. e-NAM reduces their influence by enabling **direct interaction between farmers and buyers** through online bidding, thereby increasing the share of returns that go directly to producers.

Increased Participation of Small Farmers

Through FPOs and digital facilitation centers, smallholder farmers are increasingly participating in e-NAM. Aggregation of produce allows them to negotiate better prices and reduce transportation costs.

Price Realization and Transparency

Transparent Auction System

The online bidding mechanism prevents price manipulation and collusion among traders. Farmers receive competitive bids based on supply–demand conditions rather than arbitrary pricing by middlemen.

Access to Real-time Price Information

e-NAM provides up-to-date prices from multiple markets, helping farmers:

- Decide the best mandi to sell their produce
- Time their sales for higher returns
- Reduce exploitation due to information asymmetry

Better decision-making leads to improved price realization.

Quality Testing and Grading

Quality certification enhances farmers' credibility and enables premium pricing. Commodities such as pulses, oilseeds, fruits, and vegetables benefit significantly from grading, which reduces disputes and increases buyer confidence.

Faster, Direct Digital Payments

Payments are transferred directly to farmers' bank accounts through electronic modes, ensuring:

- Transparency
- Reduction in cash leakages
- Timely receipt of money

This improves liquidity and trust in the marketing system.

Evidence from Field Studies and Reports

Research conducted in states like Uttar Pradesh, Maharashtra, Andhra Pradesh, and Karnataka indicates that:

- Farmers using e-NAM often receive **5–15% higher prices** compared to traditional mandi sales.
- Transaction time reduced due to online bidding and digital payments.
- Market participation increased for FPOs and small farmers.

These findings support the claim that e-NAM significantly contributes to better price realization and market efficiency.

Challenges in Full-Scale Effectiveness

Despite significant progress, e-NAM faces the following challenges:

Limited Digital Literacy

Many farmers lack training in using digital platforms for bidding and price checking.

Inadequate Infrastructure

Some mandis have insufficient facilities for:

- Quality testing
- Weighing machines

- Computerized bidding hall
- Internet connectivity

Low Inter-State Trading

Although e-NAM allows inter-state trading, actual trading volume remains low due to differences in mandi taxes and regulations across states.

Role of Traditional Commission Agents

Resistance from intermediaries sometimes slows the adoption of e-NAM in certain regions.

Lack of Storage and Logistics Support

Even when price information is available, farmers cannot delay sales due to storage constraints, limiting price advantages.

Policy Recommendations

1. **Strengthen mandi infrastructure** with better grading laboratories, digital equipment, and internet connectivity.
2. **Conduct training programs** for farmers and FPOs to improve digital literacy and platform usage.
3. **Harmonize state-level market regulations** to promote seamless inter-state trading.
4. **Develop storage and warehouse receipt systems** to enable farmers to sell when prices are favorable.
5. **Enhance participation of private buyers, processors, and exporters** to increase competition.
6. **Promote mobile-based e-NAM apps** for real-time trading and price alerts.

Conclusion

e-NAM represents a major step toward modernizing India's agricultural marketing system. By increasing market access, promoting price transparency, reducing intermediary influence, and improving price realization, e-NAM has shown promising outcomes. While challenges remain, especially related to infrastructure, digital literacy, and inter-state harmonization, ongoing reforms and capacity-building efforts can significantly enhance the platform's effectiveness. Strengthening and expanding e-NAM has the potential to transform agricultural market efficiency and contribute meaningfully to doubling farmers' income and improving rural livelihoods.