

Role of E-NAM in Improving Price Realization for Farmers

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ABSTRACT

The National Agriculture Market (e-NAM) is a transformative digital initiative launched by the Government of India to integrate fragmented agricultural markets and enhance farmers' price realization. This study examines the role of e-NAM in improving transparency, efficiency, and competitiveness in agricultural marketing. By enabling real-time price discovery, online bidding, quality-based assaying, and direct digital payments, the platform reduces the influence of intermediaries and minimizes information asymmetry. Empirical evidence suggests that e-NAM has contributed to improved price realization, with farmers experiencing price gains and reduced-price dispersion across markets. However, the effectiveness of the platform is constrained by challenges such as limited digital literacy, infrastructural gaps, regulatory inconsistencies, and low inter-state trade. Despite these limitations, e-NAM holds significant potential to modernize agricultural marketing and contribute to farmers' income enhancement if implemented more comprehensively.

INTRODUCTION

Agriculture plays a vital role in the Indian economy, employing nearly half of the country's workforce and

contributing significantly to rural livelihoods. However, despite being primary producers, farmers often receive a disproportionately low

share of the final consumer price due to inefficiencies in agricultural marketing systems. The traditional Agricultural Produce Market Committee (APMC) framework, although established to protect farmers, has over time led to market fragmentation, cartelization among traders, lack of transparency, and restricted interstate trade (Chand, 2016). In this context, the Government of India introduced the National Agriculture Market (e-NAM) in April 2016 as a flagship reform to integrate agricultural markets across the country through a digital platform. The initiative aims to create a unified national market by linking APMC mandis, thereby facilitating seamless trade of agricultural commodities. By leveraging information technology, e-NAM seeks to enhance price discovery, ensure transparency, reduce transaction costs, and ultimately improve farmers' price realization (Government of India, 2021). With increasing digitalization and policy emphasis on doubling farmers' income, e-NAM has emerged as a crucial instrument in transforming the agricultural marketing landscape of India.

1. Theoretical Framework

1.1 Concept and Operational Framework of e-NAM

e-NAM is a pan-India electronic trading portal designed to network existing APMC mandis into a unified online marketplace. It enables farmers, traders, buyers, exporters, and processors to trade agricultural commodities efficiently through a transparent digital system.

The operational mechanism involves:

- Farmers bringing produce to registered mandis
- Quality testing (assaying) of produce

- Online bidding by traders across the country
- Price discovery through competitive auction
- Digital payment directly to farmers' bank accounts

As of recent years, over 1,000+ mandis and millions of farmers have been integrated into the e-NAM platform, covering a wide range of commodities including cereals, pulses, oilseeds, fruits, and vegetables (SFAC, 2022).

1.2 Key Features Facilitating Better Price Realization

(i) Nationwide Market Integration

e-NAM breaks the geographical barriers imposed by the APMC system, allowing farmers to access buyers beyond their local mandis. This integration increases competition among buyers and helps farmers obtain better prices.

(ii) Real-Time Price Information

The platform provides real-time data on prices across different mandis, enabling farmers to make informed decisions about where and when to sell their produce.

(iii) Transparent Auction System

Online bidding minimizes the possibility of collusion and cartelization among traders, ensuring fair and competitive price discovery.

(iv) Quality Assaying and Standardization

Scientific quality testing ensures that produce is graded and priced according to quality standards, thereby rewarding farmers who produce higher-quality commodities.

(v) Digital Payment and Reduced Transaction Costs

Direct online payments reduce delays, eliminate the risk of non-payment, and lower transaction costs associated with traditional marketing systems.

1.3 Channels Through Which e-NAM Improves Price Realization

1. Increased Competition Among Buyers-

By enabling participation from multiple buyers across regions, e-NAM enhances competition, which drives up prices offered to farmers.

2. Elimination of Information Asymmetry-

Access to price information reduces exploitation by intermediaries and strengthens farmers' bargaining power.

3. Reduction in Marketing Margins-

Fewer intermediaries lead to a higher share of the final consumer price accruing to farmers (Aggarwal et al., 2017).

4. Incentivization of Quality Production-

Quality-based pricing encourages farmers to adopt better agricultural practices, resulting in higher-value produce.

5. Improved Market Efficiency-

Integration of markets reduces price dispersion and ensures that farmers receive prices closer to the national average.

1.4 Empirical Evidence and Performance-

Empirical studies and government reports highlight the positive impact of e-NAM:

- Farmers have experienced **price gains between 5% and 15%** in several commodities (SFAC, 2022).
- Commodities like **tur (pigeon pea), soybean, and mustard** have shown

improved price realization due to competitive bidding.

- Reduced price variation across markets indicates improved market integration (NITI Aayog, 2018).
- Increased participation of traders has enhanced liquidity in agricultural markets.

However, the degree of success varies across states such as Karnataka and Telangana (high adoption) versus others where implementation remains limited.

2. Discussion

Despite its significant potential to transform agricultural marketing, the implementation of e-NAM faces several structural and operational challenges that limit its effectiveness. One of the major constraints is the limited awareness and digital literacy among farmers, particularly small and marginal farmers, who often lack the necessary skills to use online trading platforms efficiently. As a result, many farmers continue to rely on traditional mandi systems and intermediaries for selling their produce. Another critical issue is the inadequate infrastructure in rural areas, including poor internet connectivity, insufficient assaying facilities, lack of grading and storage infrastructure, and weak logistics networks. These limitations hinder smooth online transactions and reduce the efficiency of the e-NAM platform. Additionally, the resistance from intermediaries such as commission agents and local traders poses a significant barrier, as they perceive e-NAM as a threat to their traditional roles and income sources, leading to partial or reluctant adoption at the mandi level. Furthermore, state-level regulatory variations create inconsistencies in implementation since agricultural marketing is governed by state laws. Differences in APMC regulations, licensing systems, and fee structures restrict seamless interstate trade and

limit the integration of markets. Lastly, although e-NAM aims to promote a unified national market, the actual volume of inter-state trade remains low due to logistical challenges, high transportation costs, and lack of harmonized policies. Collectively, these challenges reduce the overall efficiency and outreach of e-NAM, thereby restricting its ability to fully enhance farmers' price realization and achieve its intended objectives.

CONCLUSION

The introduction of e-NAM marks a paradigm shift in India's agricultural marketing system by transitioning from fragmented and localized markets to a unified, technology-driven national marketplace. By enhancing transparency, improving access to markets, and promoting competitive price discovery, e-NAM has demonstrated considerable potential in improving farmers' price realization. The platform not only reduces the role of intermediaries but also empowers farmers with critical market information, enabling them to make better marketing decisions. Furthermore, the integration of quality assaying and digital payment systems contributes to efficiency, fairness, and trust in agricultural transactions. However, the success of e-NAM is contingent upon addressing key challenges such as digital illiteracy, inadequate infrastructure, and policy inconsistencies across states. Strengthening logistics, promoting farmer awareness, expanding assaying facilities, and encouraging private sector participation are essential steps to enhance its effectiveness. In the long run, if implemented comprehensively and inclusively,

e-NAM can significantly contribute to achieving the broader goal of **doubling farmers' income**, improving rural livelihoods, and ensuring a more equitable agricultural marketing system in India.

REFERENCES

- Aggarwal, N., Jain, S. and Narayanan, S. (2017). *The long road to transformation of agricultural markets in India: Lessons from Karnataka*. Economic and Political Weekly, 52(41), pp.47–55.
- Chand, R. (2016). *e-Platform for National Agricultural Market*. Economic and Political Weekly, 51(28), pp.15–18.
- Chand, R. (2017). *Doubling Farmers' Income: Rationale, Strategy, Prospects and Action Plan*. NITI Policy Paper No. 1.
- Government of India (2021). *e-NAM: National Agriculture Market Portal Report*. Ministry of Agriculture & Farmers Welfare.
- Kumar, A., Singh, R.K.P. and Sharma, P. (2020). *Impact of e-NAM on agricultural marketing in India*. Agricultural Economics Research Review, 33(2), pp.201–210.
- NITI Aayog (2018). *Agricultural Marketing and Farmer Friendly Reforms*. Government of India.
- SFAC (2022). *Small Farmers' Agribusiness Consortium Annual Report on e-NAM*. Ministry of Agriculture.