

MP APMC Digital Ecosystem

The Digital Revolution of APMCs in Madhya Pradesh

Edited by **SUSHMA MISHRA**

In the heartland of India's agricultural economy, a silent revolution is reshaping the way farmers, traders and APMC officials interact. Madhya Pradesh is leading the way in reimagining the traditional mandi system—once defined by handwritten ledgers, verbal negotiations and long queues—into a modern, transparent and efficient digital ecosystem. What was once slow and opaque is now fast, accountable and accessible through mobile apps and web-based platforms.

This transformation is backed by the Department of Farmers Welfare and Agriculture Development, Government of Madhya Pradesh, in alignment with the national vision of the Ministry of Agriculture & Farmers Welfare (MoAFW), Government of India. At the core of the state's APMC reforms lies the phased rollout of three integrated digital platforms:

- eMANDI App – Streamlines APMC yard operations, including arrival, weighing, auctioning and settlement of payments.
- M.P. Farm Gate App – Facilitates direct, door-step trade for farmers, reducing their need to travel and expanding access to buyers.
- eANUGYA System – Manages digital No Objection Certificates (NOCs), gate passes, dispatch permissions and fee reconciliation with complete audit trails.



Verghese Abraham
Sr. Technical Director
abraham.v@nic.in



Musharraf Sultan
Sr. Technical Director
sultan.m@nic.in



Madhya Pradesh is transforming its traditional mandi (market) system into a modern, digital ecosystem. Supported by the state's Department of Farmers Welfare and aligned with the national vision, the reform introduces three key digital platforms: eMANDI App for automating yard operations, M.P. Farm Gate App for direct farmer trade and eANUGYA for managing digital permits and compliance. This shift from manual to digital processes ensures transparency, speed and traceability across the entire agricultural value chain.



Together, these platforms form a comprehensive, end-to-end digital ecosystem that ensures:

- Traceability – Every lot, from first sale to final dispatch, is digitally recorded and trackable.
- Accountability – Secure, tamper-proof e-documents and automated processes minimize fraud and manual intervention.
- Efficiency – Reduced paperwork, real-time dashboards and mobile accessibility save time and resources for all stakeholders.

This integrated system has not only improved the ease of doing business in agricultural markets but has also built greater trust among farmers, traders and regulatory authorities. It represents a model for other states to emulate in driving digital transformation in agriculture sector and rural empowerment.



The Foundation

Agricultural Produce Market Committees (APMCs) in Madhya Pradesh are governed by the Krishi Upaj Mandi Adhiniyam, 1972, which regulates the first sale of notified crops. These committees are mandated to protect farmers from exploitation, ensure fair price discovery and collect market fees while overseeing

I extend my heartfelt congratulations to NIC MPSC and Officials of MPSAMB for the successful implementation of eMANDI, now operational across 259 APMCs in the state. This digital transformation has significantly benefited farmers and traders, streamlining processes and ensuring greater transparency. I look forward to continued collaboration with NIC to develop even more robust and innovative solutions that further strengthen the agricultural marketing ecosystem in Madhya Pradesh. Wishing the NIC M.P. and M.P. Mandi Board team continued success!



Kumar Purushottam, IAS
Commissioner & Managing Director
Mandi Board, Bhopal

infrastructure like auction yards, weighbridges and storage units.

However, for decades, mandi operations relied heavily on manual processes—resulting in delays, limited pricing transparency, paper-based disputes and high administrative burden. Recognizing these challenges, the state initiated a phased digital transformation to

modernize mandi governance and empower all stakeholders, especially farmers.

Phased Rollout Timeline

- **Phase I (2019):** Digitalization of billing and NOC (Anugya) workflows
- **Phase II (2022):** Launch of M.P. Farm Gate App for direct farmer-to-trader trade
- **Phase III (2024):** Statewide implementation of eMANDI App for full yard-level digitization

eMANDI App

The eMANDI App digitizes every aspect of agri-trade conducted within the APMC yard. From gate entry to final payment, the platform enables secure, real-time and legally compliant transactions. Built on a role-based architecture, the app caters to secretaries, auctioneers, traders, licensed weighmen and farmers.

Workflow Overview

- **User Setup:** Secretaries assign operational roles within the mandi
- **Farmer Entry:** OTP-based registration; digital gate pass issued
- **Auction (Nilami):** for 72-hours auto-generates Anubandha Patrak
- **Weighing (Taul):** Carried out by licensed Tulaiyyas; results in Taul Patrak
- **Payment:** Trader initiates entry; farmer confirms via OTP; SMS alert issued

Controls and Legal Compliance

- Data edits for gate entry, auction or weighing are permitted within 72 hours, with audit trails and approvals from designated officers
- Farmers can cancel trades before weighing, subject to approval
- Fully aligned with the Krishi Upaj Mandi Adhiniyam, 1972, including:
 - Clause 17(15) – Gate Entry
 - Clause 36 – Weighing and Anubandha Patrak
 - Clause 37(2) – Bhugtan documentation

The result is a legally sound, transparent and tamper-proof transaction trail—laying the groundwork for trust and efficiency.

M.P. Farm Gate App

To expand market access for small and marginal farmers, Madhya Pradesh launched the M.P. Farm Gate App in October 2022. The app enables farmers to sell produce directly from their fields, reducing the need to physically travel to the mandi while maintaining full trade transparency and regulatory oversight.

Farm-Centric Workflow

- **Secure Onboarding:**
 - Farmers register via OTP
 - Traders enrolled under the Lok Sewa Guarantee Act



▲ Fig 9.1 eMandi App

- **Crop Listing:**
 - Farmers enter crop type, quantity and expected price
 - Listings are geo-linked to local APMCs
- **Digital Bidding & Deal Finalization:**
 - Verified traders place bids
 - Selected bid generates Sauda Patrak accepted by both parties
- **Payment and Compliance:**
 - Trader must upload Bhugtan Patrak within 24 hours

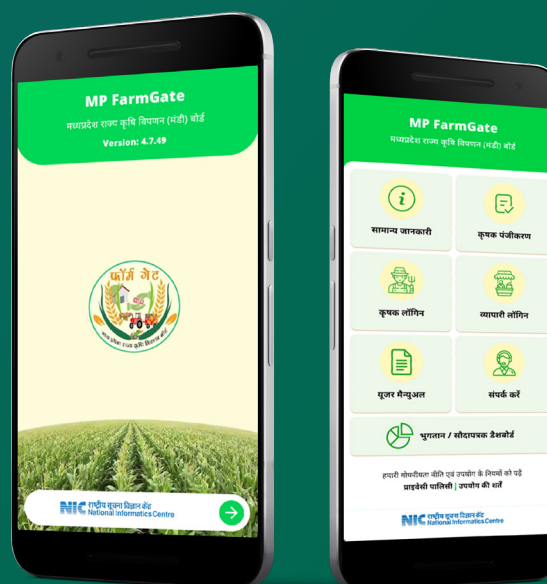
- Verified by APMC Secretary and automatically linked with eANUGYA

Benefits for Farmers

- Reduced transport cost and time
- Faster, transparent payments
- Minimized middlemen dependency
- Inclusion of significantly underserved farming segments

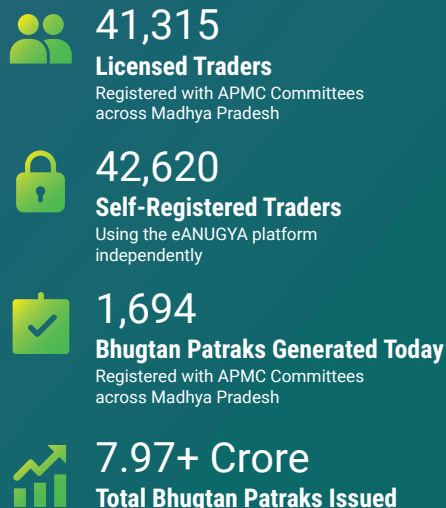
The Farm Gate App reduces the distance between the producer and the market—bringing the mandi to the village.

▼ Fig 9.2 M.P. Farm Gate App



In Focus

▼ Fig 9.3 : eANUGYA at a glance



eANUGYA

Completing the trade-to-dispatch cycle, eANUGYA ensures that movement of goods is legal, trackable and transparent. It digitizes the issuance of dispatch permissions (Form-9), consignment entries (Form-10) and calculation of all fees Applicable to be paid the mandi board.

Key Functionalities

- **Bhugtan Upload:** Trader submits digital payment receipt
- **Auto Fee Calculation:** Calculates APMC and Nirashrit Kalyan Fees
- **Stock Update:** Inventory and accounts auto-updated for seller
- **Dispatch Authorization:**
 - Trader fills Form-10
 - Form-9 (eANUGYA) auto-generated
 - Destination APMC verifies receipt

Awards

The Madhya Pradesh APMC digital ecosystem—comprising the eMANDI App, Farm Gate App and

▼ Fig 9.5 : MP Farm Gate App was recognized with the CSI SIG eGovernance Award for its innovation, scalability, and impact



▲ Fig 9.4 : eAnugya Homepage

From Manual to Digital: What's Changed

Before	After (eANUGYA)
Dispatch allowed only 10–12 PM	24x7 digital access
Paper-based Form-9 and Form-10	Secure, retrievable e-documents
Manual fee calculation and delays	Automated, transparent fee reconciliation
No real-time inventory visibility	Live dashboards and audit logs
High dependency on APMC staff	Trader-managed, system-verified workflows

eANUGYA ensures accountability, reduces fraud and supports end-to-end compliance—a critical step in building trust among stakeholders.

eANUGYA—received the CSI SIG eGovernance Award of Appreciation 2022 for its innovation, scalability and impact on farmer-centric trade reforms.

Conclusion

With the combined implementation of eMANDI, Farm Gate App and eANUGYA, Madhya Pradesh has transformed its APMC ecosystem

into a digitally unified, legally compliant and farmer-first network. The transformation has resulted in:

- Faster payments and reduced costs
- Transparent bidding and pricing
- Real-time policy-ready data
- Improved compliance and revenue assurance

More than a technological upgrade, this initiative represents a paradigm shift in agricultural governance—placing farmers at the center of a digital economy and enabling a model that's replicable across India.

As the nation moves toward Digital India @2047, the Madhya Pradesh model offers a ready blueprint for building inclusive, smart and sustainable agri-markets—proving that meaningful reform can begin with a single app and grow into a statewide movement.

Contact for more details

State Informatics Officer
NIC Madhya Pradesh State Centre
'C' & 'D' Wing, 1st Floor, Satpura BHawan, Bhopal
Madhya Pradesh - 462004
Email: sio-mp@nic.in, Phone: 0755-2551447, 2551265