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# Major digital upgrades to strengthen food storage, logistics, public distribution systems

Digital systems to reduce logistics cost and boost efficiency

By **Sanjiv Das** | November 19, 2025




Pralhad Joshi

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Union Minister of Consumer Affairs, Food and Public Distribution, Pralhad Joshi launched a suite of digital initiatives aimed at modernising warehousing operations, improving supply chain efficiency and enhancing transparency across the Public Distribution System (PDS). Joshi presided over the launch and highlighted the ministry's continued efforts to drive digital transformation in the food and public distribution sector.

At the centre of this transformation is Central Warehousing Corporation's new ERP platform, 'Bhandaran 360', built on SAP S/4HANA. Implemented ahead of schedule, the system integrates 41 modules covering HR, finance, marketing, warehouse management, contract management, project monitoring and other core functions. It is also linked with 35 external systems, including ICEGATE, port systems, FCI, NAFED, NCCF and WDRA, enabling seamless digital connectivity across the food storage and movement ecosystem.

The new system introduces:

Single Sign-On and role-based access to improve security and reduce manual dependency
End-to-end data encryption and audit trails
Real-time dashboards showing operations from warehouse level to corporate level
Automated workflows with Chatbots and RPA to improve turnaround time
Predictive analytics for faster decision-making

The upgraded platform also adds several new features such as a lead and marketing management module, integrated HRMS, project planning, SAP FICO, smart material management, biometric and geo-tagged attendance, a mobile app for measurement books, and strengthened contract monitoring.

These enhancements standardise operations across all CWC warehouses and support faster expansion, better service quality and improved accountability. It helps ease of doing business and ease of living for farmers, FPO's, cooperatives, traders, MSME's and large enterprises including e-commerce players.

Smart EXIM Warehouse System to automate container and cargo handling

Under Digital Transformation 2.0, CWC has also introduced the Smart EXIM Warehouse System for container freight stations (CFS/ICD) and general warehouses. This system uses AI, IoT, FASTag, OCR/ANPR, GNSS and other technologies to automate key processes.

Major components include:

Gate Automation System integrated with port and rail systems for auto-fetching vehicle and container details, FASTag-based entry, and automatic record generation

Yard Management with Digital Twin, providing real-time tracking of containers and equipment and optimising movement inside the yard

Smart Inventory Management, which counts and tracks cargo in real time and auto-updates records with ERP-WMS integration

These tools reduce manual intervention, speed up cargo handling and bring end-to-end transparency to logistics operations, improves turnaround time and employee productivity

The Food Corporation of India (FCI) has introduced ANNA DARPAN, a new microservices-based platform that replaces the existing Depot Online System. ANNA DARPAN connects key activities such as procurement, storage, movement, sales, quality checks, labour management and contract monitoring under one integrated system. It serves as a single unified source of truth for both FCI and DFPD

Key features include:

A mobile-first design for anytime access
Smooth integration with internal and external systems for uniform data
Real-time dashboards across mandis, depots, railheads and offices
A single, reliable information flow for faster decisions and improved transparency
The platform is expected to significantly improve the efficiency of India’s food supply chain.

Department of Food and Public Distribution has also launched ASHA, Anna Sahayata Holistic AI Solution, an AI-based platform that allows beneficiaries to share their feedback on ration distribution through AI enabled calls in their preferred language.

ASHA helps beneficiaries report whether they received their full entitlement, the quality of foodgrains, and any difficulty faced at Fair Price Shops. The system uses multilingual translation, sentiment analysis, automated grievance categorisation and real-time dashboards for administrators. Asha reaches 20 lakh beneficiaries monthly across India, developed in partnership with Wadhwani foundation and backed by India AI mission via Bhashini's multilingual AI infrastructure.

The Union Minister said that newly launched Hub Silo Complex at Malout, Punjab (1.5 lakh metric tonne) demonstrates our government commitment to world-class storage infrastructure for food security and PDS efficiency. These steel silos provide better grain preservation from moisture, pests and temperature fluctuations reducing spoilage and maintaining quality.

A modern steel silo facility for scientific and loss-free grain storage will ensures better quality foodgrains reach ration-card holders, while reducing wastage and spoilage. This will also provide higher storage capacity in a smaller footprint compared to warehouses, improved efficiency through automated loading and unloading and significant cost savings by minimising manual labour and post-harvest losses.

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