

GOVERNMENT OF INDIA
MINISTRY OF CONSUMER AFFAIRS, FOOD & PUBLIC DISTRIBUTION
DEPARTMENT OF FOOD AND PUBLIC DISTRIBUTION

RAJYA SABHA
UNSTARRED QUESTION NO. 1787
TO BE ANSWERED ON 16TH DECEMBER, 2025

DIGITAL UPGRADES TO STRENGTHEN FOOD STORAGE

1787 SHRI ASHOKRAO SHANKARAO CHAVAN:

Will the Minister of Consumer Affairs, Food and Public Distribution be pleased to state:

- (a) whether Government has recently announced major digital upgrades aimed at strengthening food storage, logistics and enhancing transparency across the Public Distribution System (PDS), if so, the details thereof;
- (b) the details of digital solutions and technologies being introduced, such as real-time monitoring systems, automated warehousing, supply-chain digitisation or smart ration distribution mechanisms;
- (c) the manner in which these upgrades are likely to improve transparency, reduce leakages and enhance efficiency in food procurement and distribution;
- (d) the States/UTs identified for priority implementation of these digital upgrades; and
- (e) whether Government has allocated any specific funds for these initiatives, if so, the details thereof?

A N S W E R
MINISTER OF STATE FOR MINISTRY OF CONSUMER AFFAIRS,
FOOD & PUBLIC DISTRIBUTION
(SHRIMATI NIMUBEN JAYANTIBHAI BAMBHANIYA)

(a) to (c): Department of Food & Public Distribution (DFPD), has taken following digital initiatives aiming to strengthening food storage, logistics and enhancing transparency across the Public Distribution System(PDS): -

Public Distribution System (PDS) Reforms:-

Anna Sahayata Holistic AI solution (ASHA) :

ASHA is an AI-driven citizen feedback and grievance management platform, designed to enable large-scale engagement with beneficiaries of the National Food Security Act (NFSA) and the Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY). Through multilingual communication channels such as WhatsApp, IVRS, and cloud telephony, ASHA allows citizens across India to share feedback, raise grievances, and assess service delivery in their preferred language.

SMART PDS:-

Further, this Department is implementing “Scheme for Modernisation and Reforms through Technology in Public Distribution System (SMART-PDS)” Scheme to strengthen the technology infrastructure in Public Distribution System (PDS) to lead the technology driven reforms and transformative change in the entire PDS ecosystem covering NFSA and State schemes. This Scheme includes four modules namely (i) Food Grains Procurement, (ii) Supply Chain Management/ Allocation of Grains, (iii) Ration Cards Management System & Fair Price Shop Management and (iv) Biometric Based Grains Distribution Module (eKYC).

Other PDS Reforms

Under PDS reforms, ration cards/beneficiaries database have been completely (100%) digitized in all States/UTs, transparency portal and online grievance redressal facility/Toll-free number have been implemented in all States/UTs. Further online allocation has been implemented in all States/UTs (except UTs of Chandigarh, Puducherry and urban areas of Dadra & Nagar Haveli which have adopted DBT Cash Transfer scheme) and supply chain has been computerized in 31 States/UTs.

Storage Related Reforms :-

(i) Smart Warehouse Project :-

Department is in the process of converting 150 owned Depots of Food Corporation of India (FCI) to smart warehouses on pilot basis. Besides, all the food grain depots of Central Warehousing Corporation (CWC) are also covered under smart warehouse project.

Under this project, traditional depots are converted in smart warehouses which are equipped with different sensors like smoke sensors, fire sensors & gate opening sensor etc. for monitoring key parameters such as CO₂, phosphine levels, fire hazards, humidity, unauthorized entry and temperature on real time basis.

This initiative is to ensure real-time visibility, timely intervention, data-driven decision-making & standardized operations across all depots contributing to ensure safe, secure, and efficient food grain storage and distribution.

(ii) Anna Darpan Project :-

The Department has initiated the development of “ANNA DARPARAN” a next generation, microservices- based integrated supply chain management system. The system designed to streamline operations across Mandis, Mills, Depots and all administrative levels. The Anna Darpan project pilot has been launched in 108 Depots on 18.11.2025.

(iii) Depot Darpan Portal: -

Depot Darpan Portal is a digital platform launched by this Department to enhance the monitoring, transparency and efficiency of food-grain storage depots under PDS.

This Portal uses a composite scoring system, assessing depots on two broad categories: Infrastructure and Operational Parameters. Based on the scores, each depot receives a star rating,

which is meant to provide a quick assessment of depot performance. Validation of data is built into the process via 100% supervisory officer verification and some random third-party audits to ensure reliability.

(iv) “Anna Chakra” PDS Supply Chain Optimization Tool:

Department of Food and Public Distribution (DFPD) has implemented “Anna Chakra” tool for PDS Supply Chain Optimization. The tool is designed to streamline the PDS supply chain, improving efficiency, cutting carbon emissions, and reducing overall costs while supporting 81 crore vulnerable citizens. Early results are encouraging, transportation costs are estimated to be reduced by nearly Rs. 250 crore annually. Using state-specific algorithms, the system optimizes routing based on warehouse locations, storage capacities, and road distances, achieving a 15 to 50% reduction in transport distances.

“Anna Chakra” Inter-state Route optimization tool :

Inter-state movement optimization has been undertaken to streamline and enhance the interstate movement operations of foodgrains, primarily by rail, undertaken by the Food Corporation of India (FCI). These movements are planned to meet Public Distribution System (PDS) requirements in consuming states while simultaneously managing storage space in procuring or surplus regions. The daily planning and execution of these operations is carried out by FCI using the tool developed for this purpose.

(d): The reforms stated at point (a) to (c) above are effective across the country.

(e): The initiatives mentioned at point (a) to (c) are supported by the funds available with the Department or the FCI, while CWC is carrying out the initiatives through its own funds.
