

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

RAJYA SABHA
UNSTARRED QUESTION NO. 1157
TO BE ANSWERED ON 10TH FEBRUARY, 2026

MODERNISING FOODGRAIN STORAGE

1157: SHRI RATANJIT PRATAP NARAIN SINGH:

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

- (a): the initiatives being undertaken by the Food Corporation of India (FCI) to modernise foodgrain storage, handling and supply chains through technologies such as scientific silos, digital monitoring and real-time tracking;
- (b): the manner in which FCI's outreach and public engagement efforts are enhancing transparency and citizen awareness regarding India's foodgrain management ecosystem;
- (c): the steps taken by FCI to ensure affordability and quality of foodgrains through mechanisms such as open market sales; and
- (d): the manner in which these measures contribute to national food security, price stabilisation and the vision of Viksit Bharat 2047?

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

(a): Food Corporation of India(FCI) has taken following initiatives to modernise foodgrain storage, handling and supply chains through technologies such as scientific silos, digital monitoring and real-time tracking: -

Smart Warehouse Project : FCI is in the process of converting its 150 owned Depots to smart warehouses on pilot basis. Under this project, traditional depots are proposed to be 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.

Conversion of traditional depots into smart warehouse project depends on various factors like successful results of piloting, selection of sites/locations, availability of funds etc.

Anna Darpan Project : This Ministry has initiated the development of “ANNA DARPAN” 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.

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

Key features and purpose of Depot Darpan:

- a. Depot/warehouse managers upload geo-tagged data regarding infrastructure, operations, and financial performance of the depot.
- b. Portal uses a composite scoring system, assessing depots on two broad categories: infrastructure (safety, storage conditions, technology use, compliance) and operational parameters (stock turnover, losses, space utilisation, manpower costs etc.).
- c. Based on the scores, each depot receives a star rating, which is meant to provide a quick assessment of depot performance.
- d. Validation of data is built into the process via 100% supervisory officer verification and some random third-party audits to ensure reliability.
- e. All the FCI's owned and hired warehouses are covered under Depot Darpan portal.

Silos-Scientific Storage of Foodgrains: Silo storage represents a highly mechanized and modern method of bulk foodgrains storage, ensuring superior preservation and enhanced shelf life. It requires only one-third of the land area compared to conventional storage methods, lowers transit and overhead costs such as those associated with gunny bags, reduces manpower requirements, and ensures consistent quality through scientific handling and storage practices.

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.

VLTS: The Ministry through FCI has implemented a GPS-enabled Vehicle Location Tracking System (VLTS) to ensure end-to-end monitoring of food grain transportation under Road Transport Contracts (RTC). The system provides real-time vehicle and rake tracking, geofenced routes, event-based alerts, and integration with ULIP[Unified Logistics Interface Platform] (Vahan & FASTag) and FOIS(Freight Operation Information System). VLTS offers role-based access to transporters and FCI users across all organizational levels. Initiated in January 2023, the project was fully launched in May 2023.

As on 29 January 2026, VLTS has been 100% implemented across 1,352 depots, covering 347 transport contractors, 31,328 vehicles, and 197,563 completed trips.

CCTV and IoT technologies:-

This technologies transform depot operations by ensuring:-

- I. Real-time visibility
- II. Timely intervention
- III. Data-driven decision-making
- IV. Standardized operations across all depots

These advancements directly contribute to ensure safe, secure, and efficient food grain storage and distribution.

(b): All the initiatives mentioned at point (a) above are found very helpful to enhance transparency in overall food chain supply management. Depot Online System(DOS), ASHA (Anna Sahayata Holistic AI) are some other initiatives for similar purpose. This Ministry & FCI actively participated on its media handles to disseminate the information related to ongoing scheme, benefits to its stakeholders as well as other participating agencies.

(c) & (d): FCI is committed for quality assurance through a dedicated wing of Quality Control officers and officials for procurement, preservation and distribution of foodgrains to the consumers to provide maximum contribution to effective food security management.

At the time of procurement: -

FCI follows well defined Quality specifications stipulated by the Govt. of India for procurement of Fair Average Quality stock meant for distribution under public distribution system and other welfare schemes.

FCI follows BIS methods of sampling and analysis of food grains to judge the quality of foodgrains to ensure procurement of quality foodgrains.

At the time of Storage:-

Scientific code of practices are adopted for safe storage of food grains.

Regular monitoring of health of food grains by way of periodical inspections.

Prophylactic (spraying of insecticides) and curative treatments (fumigation) are carried out regularly and timely in godowns for the control of stored grain insect pests.

At the time of Distribution:-

There is a well-defined procedure of joint sampling and inspection of food grain stock by State Govt. and FCI to ensure that only good Quality food grains conforming to food safety standards are issued under Public Distribution system and other welfare schemes.

In order to save precious foodgrains, transportation of foodgrains is carried out in covered wagons/trucks covered with tarpaulin covers. To avoid any contamination to the stocks, tarpaulin sheets in spread on the floor of wagons while loading into the wagons.

Moreover, Government of India sells surplus food grains (Wheat & Rice) through open sale under Open Market Sales Scheme (Domestic) {OMSS(D)}. This helps increase the availability of foodgrains in the market, control inflation, ensure food security and make foodgrains more affordable for the general population. In addition, Bharat Atta and Bharat Rice

were launched on 06.11.2023 and 06.02.2024, respectively, with a view to provide atta (wheat flour) and rice to general consumers at subsidized rates under Open Market Sale Scheme (Domestic) {OMSS(D)} policy.

All the aforesaid initiatives of the Government are started to align with the vision of Viksit Bharat @2047.
