



## Mega Food Storage Plan: Challenges & Way Forward

This editorial is based on [Pitfalls of the food storage plan](#) which was published in The Hindu Business line on 07/06/2023. It talks about the newly approved Mega Food Storage Plan, its challenges and a way out.

**Prelims:** [Mega Food Storage Plan](#), [FPOs](#), [Cooperative sector](#), [Food security](#), [Primary Agricultural Credit Societies \(PACS\)](#), [Inter-Ministerial Committee](#), [Food Corporation of India](#)

**Mains:** Mega Food Storage Plan - Benefits, challenges and Way Forward

The Union Cabinet has approved a Rs 1 lakh crore plan for [“World’s Largest Grain Storage Plan in Cooperative Sector”](#) by the convergence of various schemes. The latest decision of creating additional decentralised grain storage at the block level is a positive step towards strengthening the agriculture sector.

The new initiative tries to address two of the most important objectives of farm laws -strengthening/expanding the market infrastructure and ensuring remunerative prices to farmers.

It is disturbing to see grains, amounting to thousands of tonnes, getting wet in the market yards. Market yards fail to provide basic protection to the produce inside the yard. These issues also adversely affect the grains that are just harvested (farm level) and also the crops that are about to be harvested resulting in huge losses for farmers. Reducing post-harvest losses should be a key objective of the new storage infrastructure.

### What is this Mega Food Storage Plan?

- It'll increase foodgrain storage capacity by 70 million tonnes in the cooperative sector.
  - This will be world's largest grain storage plan in the cooperative sector.
- The plan will let cooperatives set up decentralised storage facilities across the country, in a move to reduce the burden on [Food Corporation of India \(FCI\)](#), cut wastage of farm produce and help farmers plan their sales better.
- The plan will converge existing schemes of the ministry of agriculture and farmers welfare, ministry of consumer affairs, food and public distribution, and ministry of food processing industries, and to utilize the funds available under the schemes for this purpose.

### What are the Major Highlights of the Storage Plan?

- **Convergence of schemes:** The plan aims to converge eight ongoing schemes of three ministries to address the shortage of agricultural storage infrastructure in India.
- **Inter-Ministerial Committee:** An Inter-Ministerial Committee (IMC) will be formed to oversee the implementation of the grain storage plan.

- The committee will be chaired by the Minister of Cooperation and will include the Ministers of Agriculture and Farmers Welfare, Consumer Affairs, Food and Public Distribution, and Food Processing Industries, along with relevant secretaries.
- **Strengthening cooperatives:** The Ministry of Cooperation has developed the grain storage plan to leverage the strength of cooperatives and transform them into successful business enterprises. This aligns with the vision of “**Sahakar-se-Samriddhi**” (Cooperation for Prosperity).
- **Agri-infrastructure at PACS level:** The plan focuses on establishing agri-infrastructure, including warehouses, custom hiring centers, and processing units, at the level of **Primary Agricultural Credit Societies (PACS)**.
  - This decentralized approach aims to enhance the economic viability of PACS and contribute to the growth of the Indian agricultural sector.
- **Pilot project:** The Ministry of Cooperation will implement a pilot project in at least 10 selected districts to test and refine the grain storage plan’s implementation strategies and assess its outcomes.

## How will the Plan benefit?

- **Reducing post-harvest losses** by creating decentralized storage capacity at the local level, which will prevent spoilage and wastage of food grains.
- **Preventing distress sale** by providing farmers with various options, such as selling their produce to state agencies or FCI, storing their produce in godowns, or processing their produce in common units.
- **Enhancing income** by enabling PACS to diversify their business activities, such as serving as fair price shops, setting up custom hiring centers, etc.
- **Improving food security** by increasing the availability and accessibility of food grains for consumers, especially the poor and vulnerable sections.
- **Reducing transportation costs** by minimizing the movement of food grains from procurement centers to warehouses and from warehouses to fair price shops.

## What are Post Harvest losses?

- Post-harvest losses are the measurable quantitative and qualitative losses in a given product that occur between harvest and the moment of human consumption.
- These losses can affect various aspects of the product, such as its quantity, quality, nutritional value, edibility, and marketability.

## What do the Stats say about Post Harvest Crop losses?

- The average post-harvest losses range between:
  - 10-16% for major cereal crops
  - 26% in the case of wheat
  - 34% in the case of fruits and vegetables.
- The economic value of these losses was INR 926.51 billion (USD 15.19 billion) in 2014.

## What are the Reasons behind Post Harvest losses?

- **Infrastructure Deficiency:** Suboptimal storage capacity and absence of cold chain infrastructure lead to microbial growth and quality degradation. Scarcity of modern processing units results in enzymatic browning and reduced shelf life.
- **Handling and Packaging Errors:** Abrasive handling and unsuitable packaging lead to physical injury and exposure to biotic and abiotic stressors. Also, Inadequate transportation infrastructure causes transit delays and mechanical damage.
- **Market Disconnection:** Restricted market access and price fluctuations increase post-harvest losses.
- **Pest and Disease Outbreaks:** Insufficient pest and disease management practices cause crop spoilage and contamination.
- **Financial Constraints:** Insufficient resources and limited access to credit hinder investment in improved facilities and technologies.

## How to reduce Post Harvest Losses?

- **Assessing maturity and harvesting** the crop at the appropriate stage, using proper tools and techniques.
- **Checking water quality and temperature and avoiding contamination or damage during washing and cleaning.**
- **Improve market access for farmers** by establishing efficient supply chains, connecting them with suitable buyers, and promoting fair pricing mechanisms to minimize delays in selling produce.
- **Using proper storage methods** such as hermetic or air-tight containers, which can prevent insects, rodents, mould, and moisture from spoiling the crop.
- **Implement and enforce quality standards and certifications** for harvested produce to ensure adherence to proper handling, storage, and processing practices.
- **Upgrade transportation infrastructure**, including road networks and logistics, and promote the use of refrigerated vehicles to minimize delays and damage during transit.

## What are the Challenges associated with the Plan?

- **Conflict with FPOs:** The main objective of promoting [Farmer Producer Organisation \(FPOs\)](#) is to address the well-recognised limitations of [co-operative societies](#) and it is aimed to cover all the blocks of the country. FPOs are also involved in post-harvest handling of the produce that may come in conflict with the agriculture co-operatives.
- **Agri Co-operatives aren't so efficient:** Agriculture co-ops are inefficient but have been given financial responsibilities and storage infrastructure implementation. This decision is unclear, especially since FPOs have better governance as businesses.
  - The problems associated with agriculture co-operatives include elite capture, bureaucratic/political interference, poor marketing.
  - As a result, small and marginal farmers lose on gaining access to competitive markets and getting remunerative prices.
- **Infrastructure managing and maintaining:** It is easy to create infrastructure but managing and maintaining it is a bigger challenge. India has an unenviable record of maintaining its infrastructure, be it FCI storage, drinking water systems, irrigation systems, etc. [Capital maintenance expenditure \(Capex\)](#) is rarely incorporated into annual budgets.
  - Moreover, India has the storage capacity for only one-eighth of its annual perishable produce.
- **Food Quality Management:** Maintaining food quality is crucial for nutrition security. Often the [PDS](#) distributes poor quality grains due to low quality storage infrastructure with primitive technologies (FCI godowns) and long spans of storage.

## What could be the Possible Solutions?

- **Implement through PPP or FPOs:** The food storage initiative would have served better if implemented under [private-public-people \(PPP\)](#) initiative in the lines of FPOs. Even bringing it under the umbrella of FPO would have been a better option.
  - **Modernize the Existing storage:** Modernising the existing storage infrastructure should be a priority. The move should be to go beyond grains and create storage infrastructure for perishable commodities (fruits, vegetables, milk, meat, fish, etc.).
  - **Don't ignore the Horticulture Crops:** Because of the increasing production of [horticultural crops](#), there is need for creating adequate storage facilities. While doubling farm incomes is linked to cultivation of high value crops (horticultural), providing sufficient storage infrastructure for curbing distress sale and wastage is a necessary condition.
    - The value of food losses (agriculture, horticulture, milk, meat and fish) is above ₹1,40,000 crore a year.
  - **Focus on Processing for Perishables:** In the case of perishables, processing can increase the longevity of the food and may reduce its nutrition value. Again, modern technologies are required for ensuring high quality processing.
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**Drishti Mains Question:**

Critically analyse the recently approved Mega Storage Plan through cooperatives. Also, suggest some measures for its effective implementation.

**UPSC Civil Services Examination Previous Year Questions (PYQs)**

**Prelims**

**Q1. Consider the following statements: (2020)**

1. In terms of short-term credit delivery to the agriculture sector, District Central Cooperative Banks (DCCBs) deliver more credit in comparison to Scheduled Commercial Banks and Regional Rural Banks.
2. One of the most important functions of DCCBs is to provide funds to the Primary Agricultural Credit Societies.

**Which of the statements given above is/are correct?**

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Ans: (b)**

**Q2. With reference to 'Urban Cooperative Banks' in India, consider the following statements: (2021)**

1. They are supervised and regulated by local boards set up by the State Governments.
2. They can issue equity shares and preference shares.
3. They were brought under the purview of the Banking Regulation Act, 1949 through an Amendment in 1966.

**Which of the statements given above is/are correct?**

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**Ans: (b)**

**Mains**

**Q.** In the villages itself no form of credit organisation will be suitable except the cooperative society." – All India Rural Credit Survey. Discuss this statement in the background of agricultural finance in India. What constraints and challenges do financial institutions supplying agricultural finance face? How can technology be used to better reach and serve rural clients? **(2014)**

