



UPSC &amp; STATE PCS CURRENT AFFAIRS · UJIYARI.COM

EDITORIAL ANALYSIS

# Food Worth ₹1.55 Lakh Crore Wasted: India's Cold-Chain and Systems Failure

THE HINDU

15 April 2026

ECONOMY

ENVIRONMENT

SOCIAL ISSUES

GS3

CURATED &amp; WRITTEN BY

**Bharat Choudhary**

UPSC Educator &amp; Content Creator

[linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)

ALSO FROM THE CREATOR

**BharatNotes**Free UPSC notes, MCQs, PYQ analysis. **100% Free.**[bharatnotes.com](http://bharatnotes.com) →

ADVERTISE

**Advertise with Ujiyari**

Reach thousands of UPSC aspirants daily.

[epicbharat@gmail.com](mailto:epicbharat@gmail.com)

# Food Worth ₹1.55 Lakh Crore Wasted: India's Cold-Chain and Systems Failure

 The Hindu

15 April 2026

GS3

 The Hindu

4 tags ▾

**INTERVIEW ANGLE**

*"India ranks 2nd globally in food waste volume and 111th on the Global Hunger Index — a paradox that indicts supply chains, not production. Is the fix primarily technological (cold chain), legal (jute packaging reform), or behavioural?"*

Source: [Original editorial](#) ↗

The Hindu

**EDITORIAL SUMMARY**

India wastes ~80 million tonnes of food annually (₹1.55 lakh crore), ranking 2nd globally in food waste volume while 111th on the Global Hunger Index. The cause is not production failure but systemic supply-chain, regulatory, and behavioural failure. The reform pathway requires cold-chain expansion, jute packaging reform, mandatory retailer disclosure, and national food-sharing frameworks.

## THE SCALE

METRIC	VALUE (2024-25)
Total food waste	<b>78–80 MT/year</b>
Value wasted	<b>~₹1.55 lakh crore</b>
Ranking — food waste volume	<b>2nd globally</b> (after China)
Global Hunger Index rank	<b>111/125</b> (2023)
Undernourished population	<b>~195 million</b> (FAO 2022-24)
Child stunting (NFHS-5)	<b>35.5%</b>
Fruits & vegetables lost pre-consumer	<b>~48-56%</b> (CIPHET 2022)
Cold storage capacity	<b>~0.4 lakh MT</b> for fresh horticulture (~20% of need)
Cold-chain penetration	<b>~10%</b> (vs 60%+ in developed economies)

## WHERE THE LOSS HAPPENS

### Stage-Wise Breakdown

STAGE	SHARE OF TOTAL LOSS
Farm-gate (harvest + post-harvest handling)	30-40%
Storage + transport (cold-chain gaps)	20-25%
Processing	10-15%
Retail + wholesale	5-10%
Household + food service (HoReCa)	10-15%

### By Commodity

- **Cereals:** ~3-5% loss (strongest FCI infrastructure)
- **Pulses:** ~5-8% loss
- **Oilseeds:** ~10% loss
- **Fruits:** ~20-25% loss (peak loss commodity)

- **Vegetables:** ~15-20% loss
- **Dairy:** ~7-10% loss
- **Meat + fish:** ~8-12% loss

**Highest-loss commodities** are precisely those with weakest cold-chain penetration.

## POLICY RESPONSES (EXISTING)

SCHEME	OUTLAY / YEAR	THRUST
<b>Pradhan Mantri Kisan Sampada Yojana</b> (2016-17)	₹5,520 crore	Food processing infrastructure
<b>Operation Greens</b> (2018)	₹500 crore	Tomato, Onion, Potato supply chain
<b>Mission for Integrated Development of Horticulture</b>	~₹2,400 crore	Horticulture post-harvest
<b>Agriculture Infrastructure Fund</b> (2020)	₹1 lakh crore (10-year)	Cold storage, warehouses, primary processing
<b>PLI for Food Processing</b> (2021)	₹10,900 crore	Large food processors
<b>PM Gati Shakti + National Logistics Policy</b> (2022)	Integrated	Reduces logistics costs + supply friction

**Gaps:** Most schemes focus on supply-side infrastructure; demand-side behaviour and regulatory distortions (Jute Act) are neglected.

## THE JUTE PACKAGING ACT PARADOX

The **Jute Packaging (Mandatory Use) Act 1987** requires:

- 100% of foodgrains (rice, wheat) to be packed in jute bags
- 20% of sugar in jute bags

**Rationale:** Protects livelihoods of ~40 lakh jute farmers (primarily West Bengal) and ~4 lakh mill workers.

**Problem:**

- Jute is hygroscopic — absorbs ambient moisture, especially in monsoon
- Moisture damage causes ~1-2% additional storage loss vs HDPE alternatives
- At ~60 MT annual grain stocks, this is ~₹2,000-4,000 crore in avoidable loss annually

**The trade-off:** Protecting jute farmers vs protecting food value. Successive governments have chosen the former; reform would require substantial compensation architecture for jute sector.

## THE MORAL QUESTION

India's paradox is morally stark:

- Wasted food value (~₹1.55 lakh crore) > national education budget (~₹1.1 lakh crore, 2024-25)
- Wasted food calories would theoretically feed ~50-70 million people fully
- Child stunting (35%) coexists with per-capita food waste among the world's highest for developing economies

The existence of malnutrition and food waste in the same economy is not sustainable ethically or politically.

## INTERNATIONAL PRACTICE

COUNTRY	MECHANISM
<b>France (2016)</b>	Anti-Food Waste and Circular Economy Law — bans supermarkets from throwing away edible food
<b>EU</b>	Farm to Fork Strategy (2020) — mandatory food-waste reporting; 30% reduction target by 2030
<b>USA (California AB 1826)</b>	Mandatory organic-waste recycling for large generators
<b>South Korea</b>	Volume-based food-waste fees for households (pay by weight)
<b>Japan</b>	Food Loss Reduction Promotion Act 2019
<b>UAE</b>	UAE Food Bank mandatory surplus donation protocol

India has **no national food-waste law** — only scattered provisions.

## THE FIVE-PILLAR REFORM

- 1 Cold-chain scale-up** — Triple current capacity by 2030; integrate Agriculture Infrastructure Fund with priority sector lending
- 2 Jute Packaging Act moderation** — Allow HDPE for moisture-sensitive grains with compensation package for jute sector

- 3 **Mandatory retailer disclosure** — Food waste reporting for retailers >₹100 crore turnover; reduction targets by 2030
- 4 **Food-sharing legal framework** — National Good Samaritan Food Donation Act (inspired by US 1996 Emerson Act, Maharashtra + Delhi state models)
- 5 **Behavioural push** — Mission LiFE integration of food-waste messaging; school curriculum inclusion; corporate campaigns

## UPSC RELEVANCE

PAPER	ANGLE
GS3 — Agriculture	Supply chain, cold storage, APMC, post-harvest losses
GS3 — Economy	PLI Food Processing, Agriculture Infrastructure Fund, logistics
GS3 — Environment	Food-waste emissions; methane from landfills; Mission LiFE
GS2 — Governance	Jute Packaging Act; inter-ministerial coordination; Good Samaritan laws
Mains Keywords	Food waste, Global Hunger Index, Jute Packaging Act 1987, cold-chain, CIPHET, Operation Greens, PM Kisan Sampada, Agriculture Infrastructure Fund, Mission LiFE, Farm to Fork (EU)

### • KEY ARGUMENTS AT A GLANCE

**India's food waste problem — ~80 MT annually worth ₹1.55 lakh crore — is a systemic failure of cold-chain, supply-chain integration, regulation, and behaviour, not of production. The coexistence with ~195 million undernourished Indians is a moral and governance indictment that cannot be resolved by raising yields alone.**

#### ✓ SUPPORTING

- Only ~10% of Indian perishables pass through cold storage (vs 60%+ in developed economies); farm-gate losses alone account for 30-40% of harvested produce in fruits, vegetables, and dairy.

- The Jute Packaging (Mandatory Use) Act 1987 mandates jute sacks for foodgrain packaging, allegedly contributing to moisture damage and storage losses — a policy trade-off between jute-farmer welfare and food security that has not been recalibrated.
- Supply chains are fragmented between FCI procurement, state mandis, APMCs, and modern retail — each introducing handling losses; 56% of vegetables and 48% of fruits are lost or wasted before reaching consumers (CIPHET 2022).
- Household and hospitality food waste is ~10-15% of total — a cohort ignored by current policy (no equivalent of EU's Farm to Fork waste-reduction strategy).

### **COUNTER**

Procurement reform (FCI overhaul, direct farm-to-consumer models) and cold-chain expansion both require major capital investment. In a period of fiscal consolidation and tight infrastructure budgets, prioritising food waste reduction over other infrastructure (roads, rail, ports) involves political trade-offs that voters may not reward.

### **WAY FORWARD**

Five-pillar strategy: (1) Triple cold-chain capacity by 2030 via PLI for logistics + priority-sector lending; (2) Review Jute Packaging Act allowing selective moderation for moisture-sensitive grains; (3) Mandate food-waste reporting by large retailers and hospitality (> 100 rooms/seats) with a national dashboard; (4) Leverage Good Samaritan food-sharing laws (operational in Maharashtra, Delhi) nationally; (5) Integrate waste-reduction targets into Mission LiFE.

### **PRACTICE TODAY'S QUIZ**

[Take the 15 April 2026 Quiz →](#)

### **MAINS ANSWER FRAMEWORK**

#### **QUESTION**

*India wastes ~80 million tonnes of food annually worth ₹1.55 lakh crore while ranking 111th on the Global Hunger Index. Analyse the systemic causes of this paradox and propose a policy architecture combining infrastructure, regulation, and behavioural change. (250 words)*

### INTRODUCTION

India ranks 2nd globally in food waste volume (~80 MT/year, ~₹1.55 lakh crore) while simultaneously ranking 111/125 on the Global Hunger Index with ~195 million undernourished citizens. This paradox is not a production failure — India produces sufficient food — but a supply-chain, regulatory, and behavioural failure.

### BODY

Four systemic issues drive the paradox. **First, cold-chain deficit:** only ~10% of Indian perishables move through cold storage (vs 60%+ in OECD economies). Farm-gate losses in fruits, vegetables, and dairy alone account for 30-40% of harvested produce (CIPHET 2022).

NCCD's estimate: India has ~0.4 lakh MT of cold storage capacity for fresh horticulture — less than a fifth of what demand requires. **Second, regulatory distortions:** the Jute Packaging (Mandatory Use) Act 1987 mandates jute sacks for foodgrain — protecting jute farmers but contributing to moisture damage and storage losses. The Act has not been recalibrated despite repeated CAG and NITI Aayog flags. **Third, supply-chain fragmentation:** FCI procurement, state APMCs, intermediary wholesalers, and modern retail operate as discontinuous systems; the 2020-21 farm laws attempted consolidation but were repealed. **Fourth, behavioural waste:** household and hospitality waste is ~10-15% of total but entirely unaddressed in policy — no equivalent to the EU Farm-to-Fork strategy or California's AB 1826 mandatory retail food donation.

The paradox with hunger (~195 million undernourished, child stunting at 35% per NFHS-5) creates a moral urgency: every kilogram of wasted food is one more person unfed.

### CONCLUSION

The reform architecture must be five-layered: triple cold-chain capacity via PLI Logistics + priority-sector lending; selectively modernise the Jute Packaging Act (without abandoning jute farmer welfare); mandate food-waste reporting and reduction targets for retailers/hospitality; expand Good Samaritan food-sharing legal frameworks nationally; and integrate waste reduction into Mission LIFE. Reducing food waste is also the single largest near-term climate gain in agriculture — cutting emissions associated with wasted production, transport, and methane from food rotting in landfills.

### RELATED DAILY ARTICLES

15 Apr [Current Affairs Today — April 15, 2026](#)

15 Apr [Konyak Tribal Medicine: A Nagaland Herbal Formulation's...](#)

15 Apr [ILO's Universal Social Protection Report 2026: What It...](#)

15 Apr **Bharat Steel 2026 Summit: Green Steel, Hydrogen, and...**

← **NEWER EDITORIAL**

**Plastic to Parkinson's Drug: A Biotechnology Breakthrough at...**

**OLDER EDITORIAL** →

**Hormuz and the Renewable Buffer: How Solar and Wind Absorbed...**



CURATED &amp; WRITTEN BY

## Bharat Choudhary

UPSC Educator &amp; Content Creator

[linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)[Read Full Article on Ujiyari →](#)<https://ujiyari.com/editorials/2026/04/food-waste-india-1-55-lakh-crore/>

### ALSO FROM THE CREATOR

## BharatNotes

Free UPSC study platform — subject-wise notes across all 4 GS papers, Prelims MCQs, Mains answer frameworks, PYQ analysis & progress tracking. **100% Free • No Login Required.**

[Start Preparing → bharatnotes.com](https://bharatnotes.com)

### 📌 OPPORTUNITY

## Advertise with Ujiyari

Reach **thousands of serious UPSC & State PCS aspirants** daily through our PDFs, website, and social channels.

**Ideal for:** Coaching institutes • EdTech platforms • Book publishers • Exam prep apps

[✉ epicbharat@gmail.com](mailto:epicbharat@gmail.com)

Write to us for rates & media kit