

Econ 2203 | International Trade and Policy in Agriculture

Department of Development Economics

Opening: The Journey of a Kilo of Tur Dal

opening-the-journey-of-a-kilo-of-tur-dal

A kilo of **Kalaburagi tur dal** travels from a Karnataka farmer to a diaspora kitchen in **Leicester, UK**.

What stands between the farmer and the foreign consumer?

- Registrations with four government agencies
- Twelve documents crossing seven desks
- Two financial instruments spanning two continents
- One customs portal used by 1.4 million exporters

Today's lecture answers: how does this actually work?

India's agri export snapshot (FY2024):

- Total agri exports: **₹3.61 lakh crore (~\$43.7B)**
- Agricultural exporters registered: **~85,000**
- Ports handling agri cargo: **13 major + 200 minor**
- Average documents per shipment: **8-12**

Every export begins with a registration and ends with a bank certificate.

Step 1 — Pre-Export Registrations: The Four Pillars

step-1-pre-export-registrations-the-four-pillars

Before any shipment, an agricultural exporter must hold:

- 1. Import Export Code (IEC)** - Issued by DGFT (Director General of Foreign Trade) - 10-digit PAN-based code — **mandatory** for all exports - One-time registration; lifelong validity - Apply online at dgft.gov.in — fee ₹500
- 2. RCMC (Registration-cum-Membership Certificate)** - Issued by the relevant commodity body: - APEDA — processed food, fresh produce, meat, dairy, cereals - MPEDA — marine products - Spices Board — all spices - Coffee/Tea/Rubber Board — respective commodities

Sequence matters: IEC → GST → RCMC → AD Bank account. No RCMC without IEC. No export incentive claim without RCMC.

3. GST Registration

GSTIN is mandatory for tax input credit on export supplies. Exports are **zero-rated** under GST — exporter can claim refund of input taxes.

4. AD Bank Account

Authorised Dealer (AD) Category-I bank account for receiving foreign exchange. FEMA requires all export proceeds to be realised through an AD bank within **9 months** of shipment.

Export Contracts and Incoterms 2020

export-contracts-and-incoterms-2020

An **export contract** specifies: price, quantity, quality, delivery terms, payment mode, and dispute resolution.

Incoterms 2020 (ICC, Paris) – 11 standardised trade terms that define exactly **where risk and cost transfer** from seller to buyer.

Key terms for Indian agri exports:

Term	Risk Transfers At	Used For
EXW	Seller's premises	Rare in agri
FCA	Named place to carrier	Air/rail shipments
FOB	On board vessel	Most Indian agri
CIF	Destination port	Buyer-preferred
DDP	Buyer's premises	E-commerce niche

FOB vs CIF for India:

Under **FOB**, the Indian exporter's responsibility ends when goods cross the ship's rail. Freight and insurance arranged by the buyer.

Under **CIF**, the exporter arranges (and prices) freight and insurance to the destination port.

~65% of India's agri exports are on FOB terms.

CIF is preferred by Gulf and African buyers who have captive freight arrangements.

Negotiation tip: FOB is simpler for small exporters; CIF offers a higher invoice value and more price control.

Export Documents: Proof of Transaction

export-documents-proof-of-transaction

- **Commercial Invoice** — product, quantity, price, HSN/IEC; basis for customs valuation
- **Packing List** — box-by-box weight and dimensions
- **Transport document** — **B/L** (sea) or **AWB** (air)
- **Certificate of Origin (CoO)** — used for FTA preferential tariffs
- **Key idea: B/L is negotiable** (can be endorsed/transferred)

Export Documents: Compliance and Regulatory

export-documents-compliance-and-regulatory

- **Phytosanitary certificate (PPQS)** — plant products are pest-free
- **Health/inspection certificate (EIC)** — meat/marine/organic/dairy
- **Fumigation certificate** — pulses/oilseeds; treatment details
- **Shipping Bill (ICEGATE)** — customs clearance + **LEO**
- **EDPMS (RBI)** — links shipment to forex realization

Document flow: a typical agri export

document-flow-a-typical-agri-export

1. Contract signed + invoice prepared
2. Buyer arranges payment (often via **LC**)
3. Shipment booked → **B/L or AWB** issued
4. Certificates obtained + Shipping Bill filed → **LEO**
5. Documents presented to bank → payment + **EDPMS** closure

Letter of Credit: Reducing Counterparty Risk

letter-of-credit-reducing-counterparty-risk

Why LC? In international trade, buyer and seller do not know each other. The LC inserts two banks as guarantors.

Step-by-step LC mechanism:

1. Buyer and seller agree on price and LC terms
2. **Buyer's bank (Issuing Bank)** issues LC in favour of exporter
3. **Advising Bank** (exporter's bank in India) notifies exporter; may also confirm
4. Exporter ships goods; presents documents to advising bank
5. Documents checked against LC terms; bank pays exporter
6. Documents forwarded to issuing bank; buyer pays and gets documents
7. Buyer presents B/L to shipping line → collects cargo

Types of LC:

- **Sight LC:** Exporter paid immediately on document presentation
- **Usance/DA LC:** Payment deferred (30, 60, 90 days) — extends credit to buyer
- **Revolving LC:** Renews automatically for repeat shipments
- **Back-to-Back LC:** Small exporters use master LC as collateral to open LC for their suppliers

India's EXIM Bank: Pre-shipment and post-shipment credit; refinances AD banks for agri exporters.

ECGC: Export Credit Guarantee Corporation — insures against buyer default and country risk. Premium: ~0.5–1% of invoice value.

Export Credit: Pre vs Post Shipment Trend

export-credit-pre-vs-post-shipment-trend

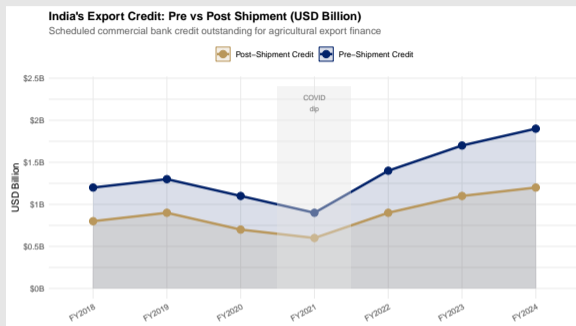


Figure 1: Pre-shipment credit dipped during COVID (FY2021) and recovered alongside export growth; post-shipment credit tracks pre-shipment with a structural lag. Source: RBI, Handbook of Statistics on Indian Economy.

fig-export-credit

Customs Clearance: ICEGATE and the Shipping Bill

customs-clearance-icegate-and-the-shipping-bill

ICEGATE (Indian Customs EDI Gateway) – the single portal for all Indian customs transactions.

Shipping Bill types:

Type	When Used
Drawback SB	Claiming duty drawback on inputs
DEEC/Advance Auth SB	Against advance authorisation
EP Copy SB	Ordinary exports
Free Shipping Bill	Personal effects, gifts

Process flow: 1. Exporter files Shipping Bill online with all document details 2. Customs Risk Management System (RMS) assesses risk 3. Low-risk: **Green Channel** → LEO (Let Export Order) in 2–4 hours 4. Medium-risk: **Yellow Channel** → document examination 5. High-risk: **Red Channel** → physical examination of cargo

LEO — Let Export Order:

The LEO is the customs officer's green light for loading. Cargo **cannot board** without LEO. Once LEO is given:

- Exporter has 24 hours to load at port
- Date of LEO = official date of export for FEMA and incentive purposes

AEO Status (Authorised Economic Operator):

Exporters with strong compliance history can apply for AEO status (Tier I, II, III). Benefits: - Fast-track customs clearance - Reduced physical examination - Priority in port queue - Deferred duty payment

In FY2024, ~12,000 entities hold AEO status in India.

India's Merchandise Exports by Mode of Transport

indias-merchandise-exports-by-mode-of-transport

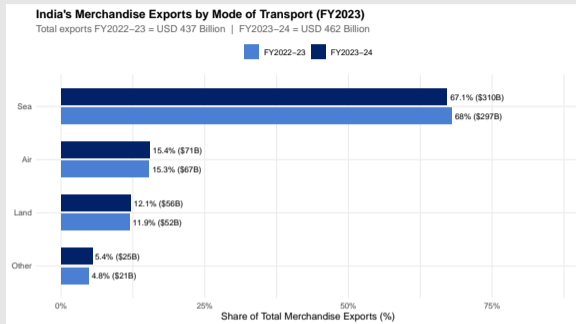


Figure 2: Sea freight dominates at ~68% of India's merchandise exports; air (~15%) and land (~12%) are secondary modes. Share composition is stable across both years. Source: DGCI&S / Ministry of Commerce and Industry, GoI.

fig-export-mode

Direct vs Indirect Export Channels

direct-vs-indirect-export-channels

Direct Export: - Exporter deals directly with foreign buyer - Higher margin, full control over branding/pricing - Higher risk (counterparty, forex, compliance) - Requires: IEC, RCMC, AD bank, full documentation - Suited to: large processors, established exporters

Examples: Kohinoor Foods (basmati direct to UAE retail), Venkateshwara Hatcheries (poultry to Middle East)

...

Indirect Export: - Sell to a **Merchant Exporter (ME)** who manages the export - No direct forex exposure; simpler for small farmer/processor - Lower price realisation (merchant takes margin) - ME provides GST exemption on purchase from manufacturer at 0.1% CGST+SGST

Export Management Company (EMC): manages exports on commission without taking title to goods.

FPO Route: :: {keybox} **Farmer Producer**

Organisations (FPOs) aggregate smallholders (avg. 1.5 ha in Karnataka) to meet minimum export quantity. APEDA's FPO Connect links 1,200+ FPOs to export markets. Tur dal FPOs in Gulbarga district now export directly to UK Indian grocery wholesalers.

Export Houses: India's Trade Titans

export-houses-indias-trade-titans

The Government of India recognises export performance tiers with **Star Export House** status, conferring priority clearances, bank credit, and EPCG benefits:

Status	Min. Export (3-yr avg)	Benefits
Export House	₹100 crore	Priority treatment
Trading House	₹500 crore	Self-certification of CoO
Star Trading House	₹2,000 crore	Fast-track customs, AEO
Premier Trading House	₹10,000 crore	All of above + policy voice (India Gate)

Major agri export houses (India):

- **ITC Agribusiness:** wheat, spices, processed food; exports to 60+ countries; \$1B+ annual turnover
- **Olam International:** cashew, spices, coffee; integrated from farm to retail
- **Adani Agri Fresh:** apple, potato, processed; cold chain integration
- **KRBL Ltd:** world's largest basmati rice brand (India Gate); exports to 90+ countries
- **Apex Frozen Foods:** shrimp to USA/EU; vertically integrated aquaculture

These firms account for ~35% of India's total agricultural export value.

Export Incentive Schemes

export-incentive-schemes

- 1. RoDTEP (Remission of Duties and Taxes on Exported Products)** - Replaced MEIS in January 2021 (WTO-compliant) - Refunds embedded taxes not otherwise refunded: SGST, mandi tax, electricity duty, stamp duty - Agri rates: **0.5% to 4.3% of FOB value** - Issued as transferable scrips on ICEGATE
- 2. Advance Authorisation (AA)** - Duty-free import of inputs used in export production - Standard Input Output Norms (SION) define input ratios - Example: basmati rice exporter imports paddy from Nepal duty-free under AA
- 3. EPCG (Export Promotion Capital Goods)** - Import capital goods (cold storage, processing equipment) at **0–3% duty** - In return, commit to export 6× the duty saved over 6 years

4. Transport and Marketing Assistance (TMA) - Freight subsidy for agri exports to notified markets (Africa, EU, USA) - Cover: 50% of sea freight for small exporters; 25% for large - Products: fresh fruits/vegetables, processed food, organic, floriculture

5. MAI Scheme (Market Access Initiative) - APEDA funds participation in international trade fairs (Gulfood Dubai, SIAL Paris, Annapoorna Mumbai) - Buyer-seller meets, market studies, reverse buyer visits - Budget: ₹250 crore/year for all export promotion councils

WTO compliance note: RoDTEP is WTO-consistent (remission of domestic taxes, not export subsidy). AA and EPCG are permissible under WTO SCM Agreement as tax exemptions on inputs. TMA freight subsidy is under scrutiny — USA has raised concerns at WTO DSB.

FSSAI and Food Safety Compliance for Exports

fssai-and-food-safety-compliance-for-exports

FSSAI (Food Safety and Standards Authority of India)

- Central licensing authority for all food businesses including exporters
- An **FSSAI Central Licence** is mandatory for manufacturers/processors exporting food products
- Annual turnover > ₹20 crore or multi-state operation → Central Licence

FSSAI's role in exports:

1. **Standards alignment:** FSSAI standards increasingly aligned with Codex Alimentarius (facilitates market access)
2. **Organic certification:** FSSAI-accredited certification bodies issue Indian Organic Certificate (recognises NPOP)
3. **Bilateral equivalence:** FSSAI has equivalence arrangements with USDA NOP (organic) — US organic certifiers can certify Indian organic products

EIC accreditation for key markets:

The **Export Inspection Council (EIC)** issues health certificates that importing countries accept:

Market	Certificate	Requirement
European Union	EIC Health Cert.	Meat, fish, dairy
USA (FDA)	EIC + prior notice	Marine, processed
Japan	EIC + residue test	Marine, processed
Middle East	Halal + EIC	Meat, poultry

EIC operates 5 regional offices (Mumbai, Chennai, Kochi, Kolkata, Delhi) and 40 sub-offices. In FY2024, EIC certified **₹1.1 lakh crore** worth of exports.

Exporting Basmati Rice from Punjab to Saudi Arabia

Tracing every document, agency, and payment from paddy field to Riyadh shelf

Case Study: Punjab Basmati to Saudi Arabia — Part I

case-study-punjab-basmati-to-saudi-arabia-part-i

The exporter: Amritsar-based rice miller; 10,000 tonne annual capacity. Target: 500 MT to Saudi retail chain.

Step 1 — Registrations: - IEC from DGFT portal (already held) - APEDA RCMC (renewed annually; fee ₹7,500) - FSSAI Central Licence - AD Bank: State Bank of India, Amritsar branch

Step 2 — Contract: - Incoterm: **CIF Jeddah** - Price: \$1,100/MT; Total: \$550,000 - Payment: **Sight LC** from Riyad Bank (Saudi), advised through SBI

Step 3 — Procurement: - Procures paddy from Amritsar mandi at MSP + premium - Milling, grading, drying; APEDA quality check (aroma, grain length)


Step 4 — Documents prepared:

#	Document	Issuing Agency
1	Commercial Invoice	Exporter
2	Packing List	Exporter
3	Certificate of Origin	FIEO/Chamber
4	Phytosanitary Certificate	PPQS Punjab
5	Fumigation Certificate	Licensed fumigator
6	Quality/Weight Certificate	EIC / SGS
7	APEDA Certificate	APEDA
8	B/L	Shipping line (NSICT)
9	EDPMS export declaration	RBI system (auto)
10	Shipping Bill	ICEGATE (Customs)

Case Study: Punjab Basmati to Saudi Arabia — Part II

case-study-punjab-basmati-to-saudi-arabia-part-ii

Step 5 — Customs clearance (JNPT, Mumbai): - Exporter files Shipping Bill on ICEGATE: **Drawback type** (to claim duty drawback on GST paid on packaging) - RMS assigns **Green Channel** — LEO granted within 3 hours - Container loaded; B/L issued by Maersk

Step 6 — Banking: - Exporter presents all 10 documents to SBI within **21 days of B/L date** (LC requirement) - SBI verifies documents against LC terms:  - SBI claims payment from Riyad Bank - **Sight LC:** SBI receives USD 550,000 within 5 working days - SBI converts USD to INR; credits exporter account

Step 7 — Post-shipment: - RBI's EDPMS marks export as "realised" - Exporter files **e-BRC** (electronic Bank Realisation Certificate) on DGFT portal - RoDTEP scrip of ~₹11 lakh (2% of FOB) issued

Saudi Arabia end:

- Saudi SFDA (food authority) inspects on arrival
- Certificate of Origin checked against GCC preferential tariff rules
- Phytosanitary certificate accepted by Saudi Plant Protection
- If fumigation certificate absent → shipment quarantined

Typical timeline (farm to Riyadh shelf):

Stage	Days
Procurement + milling	15
Documentation	5
Port + customs	3
Sea transit (JNPT–Jeddah)	8
Saudi customs clearance	5
Distribution to shelf	7
Total	~43 days

Import Procedures: The Mirror Image

import-procedures-the-mirror-image

Import procedures mirror export procedures on the buyer side.

Key documents for agricultural imports to India:

1. **Bill of Entry** – filed on ICEGATE by importer (equivalent of Shipping Bill)
2. **Commercial Invoice and Packing List**
3. **Bill of Lading / Airway Bill**
4. **Certificate of Origin** – for FTA preferential duty
5. **SPS/Phytosanitary Certificate** – from exporting country's authority

Customs assessment: - RMS assigns risk category - Basic Customs Duty + IGST (at GST rate) assessed - IGST paid by importer; can claim ITC if registered

SPS inspection for agricultural imports:

Under the **Plant Quarantine Order 2003** and **Meat Food Products Order**, all agri imports are subject to:

- Document verification (phytosanitary cert)
- Physical sampling and lab testing
- For pests: fumigation before release

Restricted/Prohibited imports:

- **STE channel:** wheat, rice, sugar, fertilisers – importable only through state trading enterprises (FCI, NAFED, MMTC) under quantitative restrictions
- **License required:** some oilseeds, livestock products
- **Prohibited:** live pigs (several ports), certain livestock breeds without quarantine

Bill of Entry types: Home Consumption (B/E), Warehousing (W/E), Ex-Bond (E/B).

Logistics and Infrastructure Challenges

logistics-and-infrastructure-challenges

India's **Logistics Performance Index (LPI)** rank: **38 out of 139** (World Bank, 2023) — up from rank 44 in 2018.

Key bottlenecks for agricultural exports:

- 1. Port congestion:** - JNPT handles 55% of India's container traffic; average dwell time: **3.2 days** (global best: 1.5 days) - Mundra, Chennai, Kochi also congested during harvest seasons
- 2. Cold chain deficit:** - India's cold storage capacity: **~35 million MT** (FY2024) - Requirement for horticulture + marine: **~90 million MT** - Gap = 55 million MT → 25–40% post-harvest losses in fruits and vegetables
- 3. Last-mile connectivity:** - Farm-to-port road quality: NH coverage improving, but mandi-to-cold store roads often unpaved in Karnataka/Maharashtra

Cost of logistics as % of GDP:

Country	Logistics Cost / GDP
Germany	8%
USA	8%
China	14%
India	~14%

High logistics costs reduce India's price competitiveness despite low labour costs.

PM GatiShakti: National Master Plan integrating roads, railways, ports, warehouses. Target: reduce logistics cost to **8% of GDP by 2030**.

Dedicated Freight Corridors (DFC): Eastern (Ludhiana–Kolkata) and Western (JNPT–Dadri) operational 2024 — will cut rail freight time by 40% for Punjab basmati, Maharashtra grapes.

Digital Initiatives in Export Trade

digital-initiatives-in-export-trade

DGFT Digital Modernisation (2021–ongoing):

- Fully online IEC issuance: **24 hours** (was 3 weeks paper-based)
- Online RCMC by APEDA: auto-linked to IEC
- e-BRC (electronic Bank Realisation Certificate): exporter's bank submits directly to DGFT portal; no paper filing
- **DARPAN platform**: dashboard for tracking all incentive scheme status in real time

SWIFT (Single Window Interface for Facilitating Trade): -

One portal for customs, FSSAI, PPQS, Drug Controller, textile ministry clearances - Launched 2016; covers 26 regulatory agencies - 2024 expansion: includes MPEDA, APEDA certificates integrated

ICEGATE 2.0 (launched 2023):

- AI-based risk management system → 70% of shipments now on Green Channel (was 55%)
- e-Sanchit: paperless document upload — all 10 export documents can be uploaded digitally; customs officer reviews on-screen
- Integration with GSTN: automatic input tax credit verification for RoDTEP computation

APEDA-DGFT integration:

APEDA's NHB system auto-generates RCMC data to DGFT; exporters need not re-enter. Certificate of Origin auto-populated from ICEGATE data for FTA claims.

India's trade facilitation score (WTO TFA): **90.59%** (2023) — above developing-country average of 74%.

Summary: The Export Ecosystem

summary-the-export-ecosystem

The full export chain for Indian agri:

Farmer/Processor

↓ *FPO aggregation / merchant exporter*

IEC + RCMC + FSSAI + AD Bank

↓ *pre-shipment*

Export Contract (Incoterm negotiated)

↓ *finance*

Letter of Credit (bank guarantee)

↓ *documentation*

10 documents (Invoice, B/L, CoO, Phyto, EIC...)

↓ *customs*

ICEGATE Shipping Bill → LEO

↓ *logistics*

Port → Ship → Destination customs

↓ *payment*

Bank realises forex → e-BRC filed

↓ *incentives*

RoDTEP scrip + drawback + TMA

Key Takeaways:

1. **IEC is the master key** — no export without it
2. **The Shipping Bill + LEO** is the customs clearance milestone — nothing loads without it
3. **The Bill of Lading** is the only negotiable title document — it unlocks payment under LC
4. **RoDTEP** has replaced MEIS as the primary export incentive — WTO-compliant, duty refund basis
5. **Cold chain and logistics** remain India's primary structural bottleneck — world-class documentation systems exist, but physical infrastructure lags

Next Lecture

next-lecture **Lecture 17 — Agricultural Export Promotion Organizations**

August 15, 2026

- APEDA: mandate, functions, financial assistance, market access achievements
- MPEDA and India's \$7.6 billion seafood export ecosystem
- The five Commodity Boards: Tea, Coffee, Rubber, Spices, Tobacco
- Export Inspection Council and quality certification
- NAFED: buffer stocks, MSP procurement, export implications

Additional Resources

additional-resources

Further Reading

- Lecture notes and APEDA/WTO official documents
- DGFT: Foreign Trade Policy 2023-28
- RBI/DGCI&S/APEDA databases for latest data

Key Data Sources

- DGCI&S: India's merchandise trade
- RBI: Balance of payments data
- APEDA: Agricultural export statistics
- WTO: Tariff and trade databases