

## Econ 2203 | International Trade and Policy in Agriculture

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Department of Development Economics

# The Institutional Architecture of India's Agri Exports

India's agricultural export performance does not emerge spontaneously from market forces. It is shaped by a **dense ecosystem of statutory bodies, commodity boards, and promotional agencies** working in parallel.

## Three tiers of the ecosystem:

### Tier 1 — Apex Mandate Bodies:

APEDA and MPEDA cover the broadest range of products

### Tier 2 — Commodity-Specific Boards:

Tea, Coffee, Rubber, Spices, Tobacco Boards target specific value chains

### Tier 3 — Quality and Finance Infrastructure:

EIC (certification), EXIM Bank (trade finance), ECGC (risk cover)

## India's agri export organizations at a glance:

Body	Est.	Ministry
APEDA	1985	Commerce
MPEDA	1972	Commerce
Tea Board	1953	Commerce
Coffee Board	1942	Commerce
Spices Board	1987	Commerce
Rubber Board	1947	Commerce
Tobacco Board	1976	Commerce
EIC	1964	Commerce
EXIM Bank	1982	Finance
ECGC	1957	Finance

**APEDA** — Agricultural and Processed Food Products Export Development Authority

- Established under the **APEDA Act, 1985**
- Under the **Ministry of Commerce and Industry**
- Headquarters: **New Delhi**; 13 regional offices across India

## Scheduled products:

APEDA covers **14 scheduled product groups** including fresh produce, processed foods, meat, dairy, cereals, and marine products (see APEDA Act Schedule).

APEDA's scheduled products cover **~60% of India's agricultural export basket by value**. Rice (basmati) alone accounts for \$5.8B of APEDA's promoted exports.

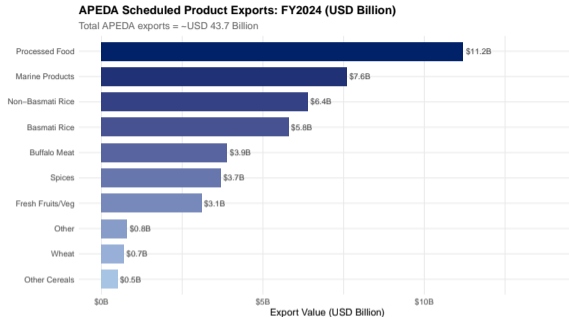
## APEDA's governing structure:

- **Chairperson:** IAS officer (Secretary-level appointment)
- **Governing Board:** 25 members — government, industry, research, farmers
- **Annual budget:** ~₹650 crore (FY2025)

## Funding mechanism:

APEDA collects a **cess** on APEDA-scheduled exports (₹2 per quintal for most commodities) which funds Market Development Assistance (MDA) grants for trade fair participation, pack houses, and quality testing.

# APEDA Scheduled Product Exports: FY2024



**Figure 1:** Processed food is the single largest APEDA export category; marine products rank second. Rice (basmati + non-basmati) together constitute ~28% of the basket. Source: APEDA Annual Report 2023-24.

## 1. Financial Assistance (MDA Grants):

- **Infrastructure:** pack houses, pre-cooling facilities, CA stores, vapour heat treatment (VHT) plants — subsidy up to 50% of cost (cap ₹50 lakh–₹3 crore)
- **Quality labs:** NABL accreditation support; pesticide residue testing equipment
- **Market promotion:** 75% reimbursement of stall cost at international fairs

## 2. Quality Standards:

- Issues guidelines for pesticide residue management (grape, mango protocols)
- Coordinates NABL-accredited testing laboratories for certifying shipments
- Manages **Generic India brand** (Incredible India!) branding at trade fairs)

## 4. Bilateral Market Access Protocols:

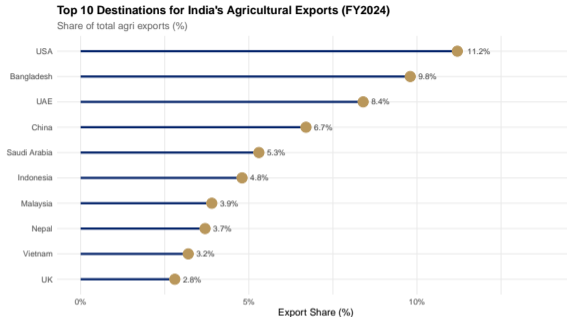
Market access for perishables requires country-to-country pest risk assessment (PRA). APEDA negotiates these protocols:

Protocol	Country	Product
VHT Protocol	<b>Japan</b>	Mango (Alphonso)
Cold Treatment	<b>South Korea</b>	Grapes
Systems Approach	<b>USA</b>	Mangoes
Residue Monitoring	<b>EU</b>	Grapes, pomegranate

### The Japan mango success story:

APEDA negotiated a **vapour heat treatment (VHT) protocol** with Japan's Ministry of Agriculture (MAFF) in 2006. Indian mango exports to Japan grew from

# Top 10 Destinations for India's Agricultural Exports



**Figure 2:** USA leads with 11.2% share driven by marine products and spices; Bangladesh and UAE are the next largest markets for rice and meat exports. Source: APEDA Annual Report 2023-24.

# APEDA's Success Metrics: Selected Achievements

## Basmati Rice:

- FY2010 export: \$1.5 billion
- FY2024 export: **\$5.8 billion** (50+ destinations)
- APEDA's GI application for Basmati at WTO (ongoing): protects brand value
- APEDA basmati traceability: QR code on bags linking to farm, miller, testing report

## Organic Exports:

- FY2024: **\$1.1 billion** (50+ countries)
- India: 4th largest organic area globally (4.43 million ha, 4.5 million farmers)
- APEDA manages NPOP (National Programme for Organic Production) – certification, accreditation
- USA (37%) and EU (35%) are top organic destinations

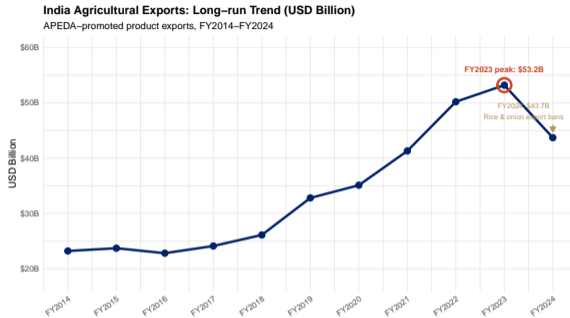
## Fresh Grapes (EU):

## APEDA trade fair presence:

Fair	Location	India Stall
Gulfood	Dubai, Feb	~400 exhibitors
SIAL	Paris, Oct	~150 exhibitors
Annapoorna	Mumbai	Domestic + buyers
FMI Show	Chicago	Marine, organic
WorldFood	Moscow	Basmati, spices

APEDA's "India Pavilion" concept – government-funded stall space offered to SME exporters at subsidised rates. In FY2024, APEDA facilitated participation of **3,200 exporters** across 47 international fairs.

# India Agricultural Exports: Long-run Trend



**Figure 3:** India's APEDA-promoted exports grew 2.3x from FY2014 to the FY2023 peak of 53.2B USD, before declining to 43.7B in FY2024 after non-basmati rice and onion export bans. Source: APEDA Annual Report 2023-24.

# MPEDA: India's Seafood Export Authority

## MPEDA — Marine Products Export Development Authority

- Established under **MPEDA Act, 1972**
- Ministry of Commerce and Industry
- Headquarters: **Kochi, Kerala**; offices in all coastal states

## India's seafood exports (FY2024):

- Total: **\$7.6 billion** (3.5 million MT)
- India: **4th largest** seafood exporter globally (after China, Norway, Vietnam)
- Shrimp: 66% of export value
- Top markets: USA (24%), EU (22%), China (14%), Japan (8%), Southeast Asia (7%)

## Product mix:

Frozen shrimp · Dried fish · Frozen fish (ribbonfish, pomfret)  
· Cephalopods (squid, cuttlefish, octopus) · Fresh/chilled fish · Seaweed · Surimi

## MPEDA's registration system:

All marine product exporters must register with MPEDA. As of FY2024:

- Processing plants: **1,200+** (EU-approved: 350+)
- Hatcheries: **2,800**
- Aquaculture farmers linked: **~1.2 million**

## Traceability and CoC (Chain of Custody):

MPEDA's CoC system tracks shrimp from farm pond to export container:

1. Farm registration (GPS-tagged)
2. Feed purchase records (antibiotic-free)
3. Harvest sampling (NRCP residue test)
4. Processing plant records
5. Container ID linked to farm batch

This traceability is required for EU and USA

## National Residue Control Plan (NRCP):

The EU requires all third-country seafood exporters to operate an NRCP — a systematic national programme testing for:

- Antibiotics (nitrofurans, chloramphenicol, tetracyclines)
- Heavy metals (mercury, lead, cadmium)
- Pesticide residues

MPEDA coordinates NRCP testing across states: - 18,000+ samples per year - Tested at CIFT, EIC, and NABL labs -

Annual audit by EU's DG-SANTE (Health and Food Safety)

**Result:** EU has kept Indian seafood on its approved list continuously since 2006 (minor suspension in 2002 was reversed after MPEDA reforms).

## USA FDA import alerts — India's challenge:

The USA FDA has issued import alerts on Indian shrimp over antibiotic residues multiple times.

**2022 import alert:** 46 Indian processing plants placed under increased surveillance; exports to USA dipped 8% in FY2023.

**MPEDA's response:** - Mandatory antibiotic-free certification for all USA-bound shrimp - MPEDA training for 50,000 Andhra farmers on prohibited antibiotics - 3rd party testing at NABL labs (EIC, SGS) before shipment

**Outcome:** USA-bound exports recovered to \$1.8B in FY2024.

SPS compliance is not a one-time event — it requires continuous investment in testing, farmer training, and government-industry

# The Five Commodity Boards: Overview

Board	Est.	HQ	Key Products	FY2024 Export	Top Markets
Tea Board	1953	Kolkata	CTC tea, orthodox, green	~\$750M	Russia, UAE, UK
Coffee Board	1942	Bengaluru	Arabica, Robusta	~\$1.2B	Italy, Germany, USA
Rubber Board	1947	Kottayam	NR, latex, crepe	~\$250M	Germany, USA, Italy
Spices Board	1987	Kochi	Chilli, cumin, cardamom, pepper	~\$3.7B	China, USA, Vietnam
Tobacco Board	1976	Guntur	FCV tobacco, cheroots	~\$800M	Belgium, Germany, Russia

All five boards perform similar functions: **research, quality standards, market development, financial assistance, and export promotion**. Each has a statutory role in the respective value chain – from regulating auctions (Tea, Tobacco) to issuing GI certificates (Spices Board for Alleppey Green Cardamom).

## India's tea sector:

- **2nd largest producer globally** (after China): 1.35 billion kg/year (FY2024)
- Domestic consumption: ~1.1 billion kg (India is its own largest consumer)
- Exports: **200–250 million kg (~\$750–800 million)**

## Tea Board functions:

- Regulates tea auctions: **Kolkata, Guwahati, Coimbatore, Cochin** auction centres
- Tea Research Association (Tocklai, Assam): oldest tropical crop research station in the world (est. 1911)
- Issues **Tea Certificate** for all shipments
- Darjeeling GI: **world's first GI-tagged tea** (EU recognition 1995, India 2004). 87 registered gardens. ~7 million kg/year.

**Top export markets:** Russia (20%), UAE (18%), UK (12%), USA

(7%), Germany (5%)

## Challenges facing Indian tea:

1. **Competition:** Kenya (low-cost CTC), China (premium green/white), Sri Lanka (strong Ceylon brand)
2. **Price stagnation:** Assam CTC auction prices have grown only 4% annually since 2015 despite input cost inflation
3. **Climate risk:** North Bengal tea gardens face erratic monsoon; 2023 drought cut Darjeeling first-flush yield by 30%
4. **Small-tea growers:** 35% of tea production from 200,000+ small growers (< 10 ha) — difficult to comply with Rainforest Alliance/UTZ standards required by European retail chains

**Tea Board response:** Grameen Krishi Mitra (GKM)

extension workers linking small growers to

Nithin M

certification. Target: 50% certified by 2028

12/20

## Coffee Board of India (est. 1942, Bengaluru):

- India: **3rd largest Arabica producer in Asia**
- Production: ~350,000 MT/year
- Exports: **\$1.2 billion (FY2024)** — record high; 15% growth over FY2023
- Arabica: Coorg, Chikmagalur (Bababudangiri GI); shade-grown, organic premium
- Robusta: Wayanad, Hassan; used in espresso blends globally
- Top markets: Italy (30%), Germany (18%), Belgium (12%), USA (9%)
- CCRI (Central Coffee Research Institute, Chikmagalur): disease-resistant variety development
- Specialty coffee promotion: India now at World Barista Championship; “Indian single origin” brand growing

## Spices Board of India (est. 1987, Kochi):

- India: **world’s largest spice exporter by value**
- 109 varieties; 8 million MT production; **4.5 million MT exports**
- **\$3.7 billion (FY2024)** — 5-year CAGR of 12%

## Top export items (FY2024):

Spice	Value
Chilli	\$1.1B
Spice Oils & Oleoresins	\$800M
Cumin	\$720M
Turmeric	\$200M
Cardamom	\$150M
Pepper	\$140M

EIC — statutory body under the **Export (Quality Control and Inspection) Act, 1963**

- Ministry of Commerce and Industry; HQ New Delhi
- Purpose: independent certification that Indian exports meet quality standards acceptable to importing countries

## Structure:

- **5 regional EIOs** (Export Inspection Offices): Mumbai, Chennai, Kochi, Kolkata, Delhi
- **40+ sub-offices** in export-intensive centres (Vizag, Surat, Amritsar, Ludhiana)
- Accredited by **EU's DG-SANTE, USFDA, Japan MHLW, Korean MFDS**

## Mandatory certification products:

Fish and fishery products · Meat and meat products · Poultry products · Dairy products · Egg products · Honey ·

## What EIC does per shipment:

1. Document verification (invoice, packing list, test reports)
2. Physical inspection: random sampling from lot
3. Lab analysis: microbiological, chemical, pesticide, heavy metals
4. Issuance of **Health Certificate** (format accepted by destination country)
5. Post-shipment surveillance: tracks rejection reports from destination

## EIC performance (FY2024):

- Certificates issued: **1.8 lakh**
- Value covered: **₹1.1 lakh crore**
- Rejection rate (border rejections at EU/USA): **0.4%** (one of the lowest among major exporters)

# NAFED: Price Stabilisation and Export Implications

**NAFED** — National Agricultural Cooperative Marketing Federation of India

- Established 1958; cooperative society under Multi-State Cooperative Societies Act
- Functions: **Price Support Scheme (PSS) procurement**, buffer stock management, retail distribution

## **PSS and its export connection:**

When prices of oilseeds (mustard, groundnut, soybean) and pulses fall below MSP: - Government activates PSS; NAFED procures from farmers at MSP - NAFED accumulates buffer stocks of oilseeds/pulses - Stocks are sold through NAFED retail, e-commerce, and open market sales when prices rise - Procurement **reduces export availability** (absorbs domestic surplus before it can be exported); but **stabilises farm incomes**

## **The NAFED export dilemma:**

NAFED is **not primarily an export organization** — it is a price stabilisation agency. But its procurement and buffer management decisions directly affect India's agri export supply.

**Tension:** When NAFED holds large tur dal stocks, export prices are firm because domestic supply is constrained. When NAFED releases stocks, domestic prices fall → farmer incomes hurt, but consumers benefit.

## **FPO linkage:**

NAFED's eMandis portal now links FPOs to government procurement at MSP and to private buyers. 1,200 FPOs linked as of FY2024, aggregating procurement from 2.5 million

farmers.

# Farmer Producer Organizations as Export Units

## The small-farm problem:

India's average farm size: **1.08 hectares** (Agriculture Census 2015–16).

Average EU/USA buyer minimum order: **20 MT per lot.**

No individual smallholder can meet buyer requirements for: - Consistent volume - Uniform quality and grading - Traceable production records - Third-party certification costs (organic, GlobalGAP)

## FPOs as aggregators:

An FPO with 500 members × 1 ha each = 500 ha aggregate.

Can produce 300–500 MT of a single crop — meeting buyer minimums.

## Successful FPO export examples:

### Mahagrapes (Maharashtra):

Cooperative of 46 grape-growing cooperatives, ~25,000 farmers.

Exports EU-compliant grapes to Netherlands, Germany, UK.

FY2024 exports: ~8,000 MT (~\$40M).

Uses APEDA-funded pack houses and cold chain in Nashik.

### Sahyadri Farms (Nashik):

12,000 farmer members; India's largest single FPO.

GlobalGAP certified; supplies Tesco UK, Carrefour.

Own cold chain, pack house, CA storage.

### NDDB dairy cooperatives:

# Government Schemes Supporting Agri Export Organizations

## **PM FME (Formalisation of Micro Food Enterprises)**

**Scheme:** - ₹10,000 crore over 5 years (2020–25) - Credit-linked subsidy (35%) for micro-enterprises upgrading to FSSAI standards - ODOP (One District One Product) focus products receive priority - 2 lakh+ enterprises formalized by FY2024 → many now eligible for export

**NABARD's Agri Infrastructure Fund (AIF):** - ₹1 lakh crore; 3% interest subvention - Pack houses, cold stores, CA chambers, primary processing centres - Linked to FPO and cooperative projects — directly supports export infrastructure

**SFAC (Small Farmers Agribusiness Consortium):** - FPO promotion, equity grant support - Connects FPOs to APEDA/MPEDA registered exporters - Pilot: 100 agri export FPOs linked directly to 3 commodity board

## **APEDA-NHB Horticulture Export Collaboration:**

NHB (National Horticulture Board) funds pack houses; APEDA funds market promotion. Joint program in: - Banana (Jalgaon, Maharashtra → Middle East) - Guava (Allahabad, UP → UK diaspora market) - Litchi (Muzaffarpur, Bihar → EU, West Asia)

## **Districts as Export Hubs (DEH) — FTP 2023–28:**

Commerce Ministry has identified **100+ districts** with specific “champion products.”

Examples: - Kalaburagi (Karnataka): Tur dal - Nashik (Maharashtra): Grapes, onions - Tirupur (Tamil Nadu): Knitwear + agri - Coorg (Karnataka): Coffee, pepper - Guntur (Andhra Pradesh): Chilli, turmeric

District Collectors coordinate between farmers, FPOs, exporters, and commodity boards. Target: every DEH district to double export value in 5 years.

# India's 2030 Agricultural Export Ambition

**APEDA's target: \$60 billion by 2030** (from \$43.7B in FY2024; CAGR ~5.4%)

**National agri-food export target (FTP 2023–28): \$100 billion by 2030**

**Strategy pillars:** 1. Diversify beyond rice dominance 2. Open new markets: Africa, Southeast Asia, South Korea 3. Value addition: processed, organic, functional foods 4. Invest in cold chain: PM GatiShakti nodes 5. Leverage GI brand premiums

## Key Takeaways:

1. **APEDA** is the backbone of India's agri export promotion — covers 60% of the export basket
2. **MPEDA** manages India's \$7.6B seafood export with rigorous quality systems essential for EU/USA access
3. **Commodity Boards** are sector-specific engines — Spices Board's \$3.7B is remarkable for a relatively small value chain
4. **EIC** provides the third-party quality assurance without which EU/USA market access is impossible
5. **FPOs** are solving the small-farm aggregation problem — Mahagrapes, Sahyadri, Amul show it is achievable at scale

### Lecture 18 — India's Agricultural Trade and Foreign Trade Policy

*August 22, 2026 — FINAL LECTURE*

- Course synthesis: from comparative advantage to India's \$43.7 billion agri export reality
- India's trade performance: FY2024 big picture and 10-year trends
- Foreign Trade Policy 2023–28: vision, themes, and agricultural provisions
- Millets, GIs, and organic exports as strategic niches
- The farmer welfare vs export competitiveness dilemma

## Further Reading

- Lecture notes and APEDA/WTO official documents
- APEDA Annual Report 2023-24
- 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