

Econ 2203 | International Trade and Policy in Agriculture

Department of Development Economics

A deep dive into India's trade structure, agricultural trade, and balance of payments

India is a **major trading nation** — ranked among the top 20 exporters and importers globally.

Key FY2024 aggregates:

- **Merchandise exports:** \$437 billion
- **Merchandise imports:** \$677 billion
- **Trade deficit:** -\$240 billion
- **Services exports:** \$338 billion
- **Remittances:** \$120 billion

Why does this matter for agriculture?

India's external sector shapes:

- Price of edible oils (imports)
- Farmer income (export demand)
- Food inflation (rupee/import costs)
- BoP sustainability

Top 5 Merchandise Export Categories — FY2024

Category	Value (USD B)	Share of Total
Engineering goods	\$109	25.0%
Petroleum products	\$79	18.1%
Chemicals & Pharma	\$65	14.9%
Agriculture & allied	\$43.7	10.0%
Gems & jewellery	\$35	8.0%
Total merchandise	\$437	

Agriculture contributes ~10% of total merchandise exports — a significant share ranking 4th by category.

Merchandise Export Composition: FY2024

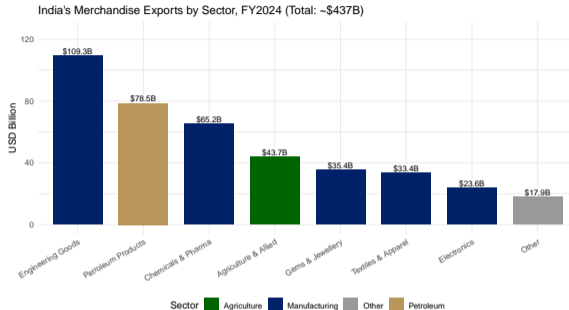


Figure 1: India's Merchandise Export Composition, FY2024 (USD billion) Source: DGCI&S / Ministry of Commerce and Industry, Gov.

Engineering goods (\$109B) dominate — India's shift toward capital goods exports. Agriculture (\$44B) is the 5th largest category, but holds outsized strategic importance for rural incomes and food security diplomacy.

Top Import Categories:

Category	USD B
Petroleum & crude oil	\$232
Engineering goods	\$91
Electronic goods	\$80
Gold	\$47
Edible oils	\$14
Pulses	\$2.8

Agricultural import vulnerability

Edible oils at \$14B represent a structural dependency – India imports ~60–65% of its edible oil needs.

This is India's single largest agricultural import burden.

Merchandise Import Composition: FY2024

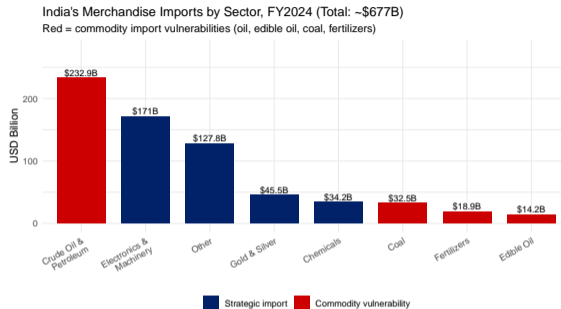


Figure 2: India's Merchandise Import Composition, FY2024 (USD billion) Source: DGCI&S / Ministry of Commerce and Industry, Gol.

Vulnerability arithmetic: Crude oil (\$233B) + Coal (\$33B) + Fertilizers (\$19B) + Edible oil (\$14B) = ~\$299B in commodity imports – 44% of total imports are subject to global commodity price shocks beyond India's control.

Agricultural Exports FY2024: Breakdown

India's total agricultural exports FY2024: ~\$43.7 billion

Commodity	USD B	Commodity	USD B
Marine products	\$7.6	Spices	\$3.7
Non-basmati rice	\$4.6	Cotton	\$2.7
Basmati rice	\$5.8	Coffee	\$1.2
Processed food	\$4.8	Others	~\$11.5

Non-basmati rice exports were restricted from August 2023, significantly curtailing export earnings.

Agricultural Imports FY2024: Breakdown

Total agricultural imports: ~\$28.2 billion

Edible Oils — \$14 billion (largest component)

Oil	USD B
Palm oil	\$9.5
Soybean oil	\$2.5
Sunflower oil	\$2.0

Other major imports:

- Pulses: **\$2.8B**
(Canada, Australia key sources)
- Fresh fruits: **\$1.8B**
- Cashew (raw): ~\$1.5B
- Spices (for re-export): ~\$0.8B

India's Net Agricultural Trade Position

Agricultural Trade Balance FY2024

Exports \$43.7B - Imports \$28.2B = **Surplus +\$15.5B**

Five-Year Trend in Agricultural Trade Surplus:

FY	Surplus (USD B)
FY2020	\$17.0
FY2021	\$20.0
FY2022	\$25.0
FY2023	\$15.8
FY2024	\$15.5

The sharp drop from FY2022 to FY2023 reflects global commodity price corrections and India's rice export restrictions.

India's Key Merchandise Trading Partners

Top Export Destinations

1. 🇺🇸 USA — \$78B
2. 🇦🇪 UAE — \$36B
3. 🇳🇱 Netherlands — \$18B
4. 🇨🇳 China — \$17B
5. 🇬🇧 UK — \$11B

Top Import Sources

1. 🇨🇳 China — \$102B
2. 🇦🇪 UAE — \$53B
3. 🇷🇺 Russia — \$44B
4. 🇺🇸 USA — \$41B
5. 🇸🇦 Saudi Arabia — \$34B

China dominates imports — especially electronics, machinery, chemicals. India's trade deficit with China alone is ~\$85B. Reducing this is a stated policy goal.

India's Trade Partners: FY2024

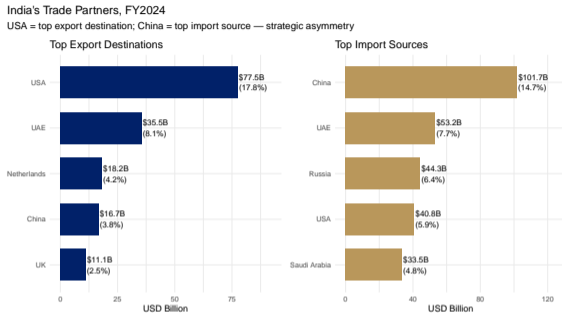


Figure 3: India's Top 5 Export Destinations and Import Sources, FY2024 Source: DGCI&S / Ministry of Commerce and Industry, GoI.

Strategic asymmetry: India exports most to the USA (\$78B) but imports most from China (\$102B). The bilateral trade deficit with China alone (~\$85B) exceeds India's entire trade surplus with the USA.

Top Agri Export Markets

1. USA — marine, spices, processed
2. Bangladesh — rice, food grains
3. UAE — rice, vegetables, spices
4. China — cotton, marine, soybean
5. Saudi Arabia — rice, spices

Rice dominates exports to South/SE Asia

India's agricultural trade geography reflects its structural reliance on SE Asia for edible oils and the Anglosphere for pulses.

Top Agri Import Sources

1. Indonesia — palm oil
2. Malaysia — palm oil
3. Canada — pulses, lentils
4. Australia — pulses, wheat (intermittent)
5. Ukraine/Argentina — sunflower/soybean oil

Services exports FY2024: \$338 billion — India's invisible export superpower

Services Category	USD B
IT/Software services	\$178
Business process & other	\$88
Travel & tourism	\$28
Financial services	\$11
Transport	\$14
Other services	\$19

Why this matters for agri trade:

IT export earnings provide forex that finances agricultural imports (edible oils, pulses).

Without IT services surplus, India's BoP position would be far more stressed.

Services Trade Composition: FY2024

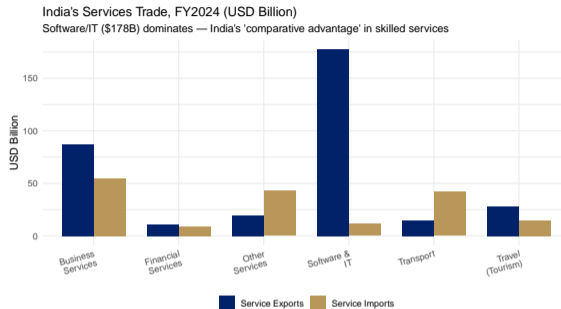


Figure 4: India's Services Trade Composition, FY2024 (USD billion) Source: RBI, Balance of Payments Statistics.

Revealed comparative advantage: India's RCA in Software/IT services is extremely high — the \$178B export vs \$11B import reflects a structural specialisation. Combined with \$88B in other business services, India's services exports offset most of the merchandise trade deficit.

India is the world's largest recipient of remittances

- FY2024 inflows: **\$120 billion**
- Share of GDP: ~3.4%
- Primary sources: Gulf countries (UAE, Saudi Arabia, Kuwait), USA, UK, Canada

Key sending states: Kerala, UP, Bihar, Rajasthan, Punjab

Remittances vs External Deficits

Goods trade deficit: $-\$240\text{B}$

+ Services surplus: $+\$164\text{B}$

= Net goods+services: $-\$76\text{B}$

+ Remittances: $+\$120\text{B}$

Remittances alone more than cover the net goods+services deficit.

Remittances: Global Comparison

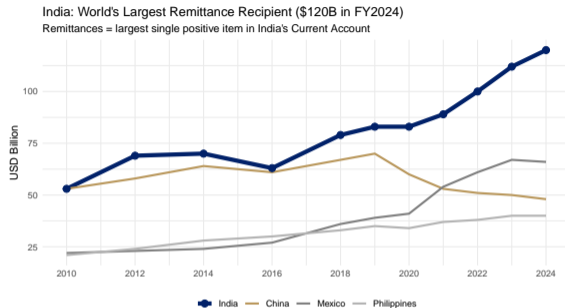


Figure 5: India: World's Largest Remittance Recipient (USD billion, 2010–2024) Source: World Bank, Migration and Remittances Data.

Gulf concentration risk: ~55% of India's remittances come from Gulf Cooperation Council (GCC) countries. Oil price slumps → Gulf construction slowdowns → remittance drops → India's CAD widens. The 1991 crisis featured exactly this channel.

Foreign Direct Investment (FDI) Flows

FDI inflows FY2024: ~\$71 billion (gross)

Top recipient sectors:

- IT & software: ~\$18B
- Financial services: ~\$9B
- Pharmaceuticals: ~\$7B
- Telecom: ~\$6B
- **Agriculture & food processing: ~\$3.6B**

FDI in agri-food is growing but remains a small fraction — India's farm sector still heavily domestic-capital-driven.

Agri FDI: \$3.6B and growing

Focus areas: - Cold chain infrastructure - Food processing (100% FDI allowed) - AgriTech startups - Contract farming/supply chains

Forex Reserves: India's Financial Buffer

India's Foreign Exchange Reserves — FY2024: \$645 billion

Components of forex reserves:

Component	USD B
Foreign currency assets (FCA)	\$571
Gold	\$53
SDR holdings (IMF)	\$18
Reserve tranche position (IMF)	\$3

Import cover: ~11 months — well above the conventional safe threshold of 3 months. This gives India significant resilience against external shocks.

The Crisis:

- By early 1991, reserves fell to **\$1 billion** (< 2 weeks of imports)
- Iraq-Kuwait war raised oil import bill
- Gulf remittances fell sharply
- Fiscal deficit had grown unsustainably
- Credit rating downgrades; capital flight

India's Response:

- IMF bailout loan (\$2.2B)
- Gold pledged as collateral (47 tonnes)
- Two-step rupee devaluation (25%)
- Structural adjustment → liberalization reforms

1991 as a turning point

The crisis forced India to:

- Open up to FDI
- Dismantle import licensing
- Devalue rupee
- Phase out industrial licensing

Agricultural trade also liberalized — QRs on agri imports phased out by 2001 (WTO bound).

Current Account Deficit (CAD) FY2024: approximately -0.7% of GDP

India's CAD trend:

Year	CAD (% GDP)	Assessment
FY2012	-4.8%	Dangerously high
FY2019	-2.1%	Elevated
FY2022	-1.7%	Moderate
FY2023	-2.0%	Moderate
FY2024	-0.7%	Comfortable

A CAD of -0.7% GDP is considered sustainable. The “safe zone” is generally under -3% for an economy of India's size and growth rate.

The Edible Oil Vulnerability: A Policy Case Study

The structural problem:

India produces ~10 million tonnes of edible oil domestically but consumes ~24 million tonnes.

The **14 million tonne import gap** = \$14B foreign exchange outflow annually.

Source concentration risk: - 90% of palm oil from Malaysia & Indonesia - Subject to export bans, price manipulation, climate shocks

Policy responses:

1. **PM KUSUM** — promote oilseed cultivation
2. **National Mission on Edible Oils (Oilpalm)** — expand domestic oil palm to NE states
3. **Import duty manipulation** — lower duties during inflation
4. **Buffer stock policy** — proposed but not implemented

Rice Export Restrictions: A Policy Dilemma

August 2023: India bans non-basmati white rice exports

Rationale: - Domestic rice prices rising - Food security concerns ahead of state elections - Erratic monsoon raised supply uncertainty

Impact: - India's rice exports fell sharply (India = 40% of global rice trade) - Global rice prices surged 30–40% - Indonesia, Philippines, West Africa faced food price spikes - India's agri export earnings fell by billions

The trade-off:

Restrict exports

Let exports flow

Lower domestic prices

Higher farmer income

Better food security

Better forex earnings

Harms trading partners

Global price stability

Classic food security vs. trade earnings dilemma – central to agri trade policy

India's Balance of Payments: Summary Picture

BoP Current Account FY2024 (approximate):

Item	USD B
Merchandise exports	+437
Merchandise imports	-677
Trade balance	-240
Services exports	+338
Services imports	-167
Services balance	+171
Primary income (net)	-32
Secondary income (remittances)	+120
Current Account Balance	~-17

CAD of ~\$17B on a GDP of ~\$3.4 trillion = about -0.5% to -0.7% GDP. Healthy and sustainable.

India's position in global trade (WTO 2024):

Merchandise trade: - Exports: **17th largest globally** - Imports: **10th largest globally** - Share of world trade: ~1.8%

Services trade: - Services exports: **7th globally** - IT services: **Largest global exporter**

Agriculture specifically: - Rice: **#1 global exporter** (40% share) - Spices: **Top 3 globally** - Cotton: **Top 3 globally** - Seafood: **Top 10 globally**

India punches above its weight in agricultural exports relative to its overall merchandise trade share.

Key vulnerabilities:

1. **Energy import dependence** — crude oil \$232B; geopolitical risk
2. **Edible oil import dependence** — \$14B; food inflation risk
3. **Electronic goods deficit** — \$80B; reflects low domestic manufacturing
4. **Gold demand** — \$47B; compresses CAD but reflects domestic saving patterns
5. **China trade deficit** — ~\$85B; supply chain dependency

Agriculture in India's external sector: 3 key roles

1. **Forex earner:** \$43.7B in exports — supports BoP, provides farmer income linkage to global prices
2. **Forex user:** \$28.2B in imports — edible oils and pulses; food security imperative but forex cost
3. **Policy instrument:** Government uses export/import restrictions to manage domestic food prices — with global spillover effects (India = swing supplier in rice, sugar, onions)

The net surplus of \$15.5B means agriculture is a **net contributor** to India's BoP — a valuable buffer.

India's trade policy objectives (2025–2030):

- Merchandise exports target: **\$1 trillion by FY2030**
- Agricultural export target: **\$100 billion by 2030**
- Increase oilseed domestic production (reduce \$14B import bill)
- Value-added processed food exports
- Agri-GI tags to premium global markets

Five things to remember:

1. **India's merchandise trade deficit is \$76B** but is more than offset by services surplus (\$171B) and remittances (\$120B)
2. **Agriculture contributes a net surplus of \$15.5B** — making it a positive contributor to the BoP
3. **Edible oil imports (\$14B) are India's single largest agricultural vulnerability** — a structural food security and forex risk
4. **India is the world's largest rice exporter** — and unilateral export restrictions have significant global price consequences
5. **Forex reserves at \$645B (11 months import cover)** provide substantial external sector resilience; a far cry from the 1991 crisis

Lecture 11 (July 7, 2026): *Foreign Exchange — Rates and Determination*

We will cover:

- What is the exchange rate and why does it matter?
- Nominal vs. real exchange rate
- PPP theory and why the rupee “should” depreciate
- Covered and uncovered interest parity
- How exchange rates affect agricultural exporters and importers

Further Reading

- *International Economics* — Salvatore (Ch. 13-14)
- *International Economics* — Appleyard & Field (Ch. 13-14)
- 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