

Today's Prelims Topics

India's Invisible Foreign Trade

Context

India's "invisibles" trade is today bigger than the "visible" merchandise trade account in its external balance of payments.

What is Visible and Invisible Trade?

Visible Trade (Goods/Merchandise)

- Involves export and import of physical goods.
- Includes items like textiles, leather, steel, aluminium, machinery, oil, electronics, etc.

Invisible Trade (Non-Merchandise)

- Comprises transactions that do not involve physical goods.
- Key components:
 - O Services exports IT/software, business, financial, R&D, consultancy, communication.
 - O Private transfers Remittances from Indians working abroad.
 - o Investment flows (FDI, FPI) Though not included in gross invisible receipts here.

India's Foreign Trade Status (2024–25)

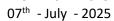
INDIA'S 'VISIBLE' VERSUS 'INVISIBLE' EXPORTS					A DELICATE BALANCE			
2003-04	Goods Exports 66.29	Invisibles Receipts 53.51	Services Exports 26.87	Private Transfers 22.18		Goods Trade Balance	Invisibles Balance	Current Account Balance
2013-14	318.61	233,57	151.81	69.64	2013-14	-147.61	115.31	-32.30
2014-15	316.55	241.65	158.11	69.82	2014-15	-144.94	118.08	-26.86
2015-16	266.37	235.04	154,31	65.59	2015-16	-130.08	107.93	-22,15
2016-17	280.14	242.05	164.20	61.30	2016-17	-112,44	98.03	-14.42
2017-18	308.97	283.41	195.09	69.13	2017-18	-160,04	111.32	-48.72
2018-19	337.24	306.48	208.00	76.40	2018-19	-180.28	123.03	-57.26
2019-20	320.43	321.71	213.19	83.20	2019-20	-157.51	132.85	-24.66
2020-21	296.30	307.25	206.09	80.19	2020-21	-102.15	126.06	23.91
2021-22	429.16	369.6	254.53	89.13	2021-22	-189,46	150.69	-38.77
2022-23	456.07	465.8	325,33	112.47	2022-23	-265.29	198.24	-67.05
2023-24	441.44	501.42	341.06	118.71	2023-24	-244.91	218.8	-26.11
2024-25	441.79	576.54	387.54	135.43	2024-25	-287.21	263.85	-23.37

Visible Trade (Merchandise Trade)

- Merchandise Exports: \$441.8 billion
 - O Slightly lower than the previous year (\$456.1 billion in 2022–23).
- Merchandise Imports: \$729 billion
 - O Driven by imports of crude oil, electronics, gold, machinery, etc.
- Goods Trade Deficit: \$287.2 billion
 - o India's highest-ever merchandise trade deficit.

Invisible Trade (Non-Merchandise)

- Gross Invisible Receipts: \$576.5 billion
 - Includes services exports and private remittances.





- Services Exports: \$387.5 billion
 - Led by software, business, financial, communication, and consultancy services.
- Remittances (Private Transfers): \$135.4 billion
 - O Money sent by Indian workers and NRIs from abroad.
- Services Trade Surplus: \$188.8 billion
 - O Services exports (\$387.5B) minus services imports (\$198.7B).
- Net Invisible Surplus: \$263.8 billion
 - o Includes both services and private transfers; helped offset the merchandise trade deficit.
- Current Account Deficit (CAD): \$23.4 billion
 - Lower than the \$32.3 billion CAD recorded in 2013–14 due to strong performance in invisibles.

Comparison with China (2024)

Indicator	India (2024–	China (2024)	Insights	
	25)			
Goods Exports	\$441.8 billion	\$3,409 billion	China is a manufacturing/export powerhouse	
Goods Imports	\$729 billion	\$2,641 billion	India imports more than it exports; China has a strong trade surplus	
Merchandise Trade Balance	- \$287.2 billion	+ \$768 billion	India has a deficit, China a large surplus	
Services Exports	\$387.5 billion	\$384 billion	India slightly leads	
Services Imports	\$198.7 billion	\$613 billion	China imports far more services	
Net Services Trade	+ \$188.8 billion	- \$229 billion	India has a significant surplus	
Net Invisibles (Total)	+ \$263.8 billion	- \$344.1 billion	India earns from invisibles; China spends more	
Current Account Balance	- \$23.4 billion (deficit)	+ \$423.9 billion (surplus)	China's surplus sustained by goods trade; India cushions deficit via invisibles	



Ottawa Convention

Context

Ukrainian President Volodymyr Zelenskyy initiated the process to withdraw from the Ottawa Convention as the war with Russia shows no sign of conclusion.

About Ottawa Convention

- **Other Name:** "Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction".
 - Ottawa Treaty or Mine Ban Treaty
- Adopted: December 1997 in Ottawa, Canada.
 - o Entered into Force: March 1, 1999.
- **Objective**: To **eliminate anti-personnel landmines (APLs)** worldwide, reduce civilian casualties, and promote humanitarian disarmament.
- Members: 165 Members
 - o India, US, Russia, China, Israel are not the members.
- Key Provisions:
 - o Prohibits the use, stockpiling, production, and transfer of anti-personnel landmines.
 - Requires the **destruction of stockpiles** within four years.
 - O Mandates the clearance of mined areas within ten years.
 - Obligates states to provide assistance to mine victims.

• Implementation Body: Implementation Support Unit under the Geneva International Centre for Humanitarian Demining (GICHD).

Source: The Print



CARICOM

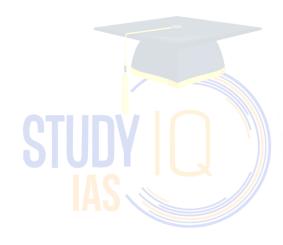
Context

Caribbean civil society urges Caricom to impose arms embargo on Israel.

About The Caribbean Community (CARICOM)

- It is a **political and economic union** of 15 member states and 6 associate members in the Caribbean, Atlantic Ocean and Americas.
- Member states: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago.
- It was established through **The Treaty of Chaguaramas in 1973.**
- Chairmanship of the Community is rotated every 6 months among the member countries' Heads.
- Main Goals: Promote economic integration and cooperation, Ensure equitable sharing of the benefits of integration and Coordinate foreign policy.

Source: ABNA News





Nagari Pracharini Sabha

Context

As debates over official languages and linguistic identity intensify in India it is timely to revisit the role of institutions like the Nagari Pracharini Sabha.

About it

- Established: January 16, 1893 in Varanasi (Banaras).
- Founders: Hindi scholars Shyam Sunder Das, Pandit Ramnarayan Mishra, and Thakur Shivkumar Singh.
- **Purpose**: To promote **Hindi in the Devanagari script** and ensure its recognition in official and literary domains.

Background:

- O During the **Mughal period**, **Persian** was the official language.
- By the British era, official language use shifted to English, Persian, and Urdu, sidelining Hindi.
- o In **1888**, Maharaja Lakshmeshwar Singh of Darbhanga introduced Hindi as an official language in his region, influenced by the slogan "Hindi, Hindu, Hindustan."

• Major Initiatives:

- Advocated for **Hindi as the language of administration and courts**.
- Took the initiative to create a standardised Hindi dictionary.
- Sent language surveyors across India (from 1908–1929) to collect regional Hindi words and meanings.

Key Publications:

- Shabd Sagar (1929): A comprehensive 11-volume Hindi dictionary.
 - Forewords by Acharya Ramchandra Shukla and Shyam Sunder Das.
- History of Hindi Literature (Hindi Sahitya ka Itihaas) by Acharya Shukla considered foundational for Hindi literary studies.
- O Nagari Pracharini Patrika (from 1896): One of the oldest research journals in Hindi.
- Saraswati Magazine (launched in 1900): Edited by Mahavir Prasad Dwivedi, instrumental in shaping modern Hindi prose and poetry.

• Legacy and Expansion:

- Opened regional branches in **Haridwar** and **New Delhi**.
- Received support from nationalist leaders like Bal Gangadhar Tilak.
- o Its patron post-Independence was Pandit Jawaharlal Nehru.
- Decline and Revival: From the 1970s, internal disputes and court cases led to its decline.
 - A 2023 verdict by the Allahabad High Court upheld the leadership of Vyomesh Shukla, restoring administrative clarity.
 - In March 2024, it republished Acharya Shukla's History of Hindi Literature and a collection of Amir Khusrau's Hindi poems, marking a revival.



Sarvepalli Radhakrishnan

Context

Andhra Pradesh has launched 'Sarvepalli Radhakrishnan Vidyarthi Mitra Kits' to provide kits to school children.

About Sarvepalli Radhakrishnan (1888-1975)

- Academic Roles:
 - Professor at Mysore and Calcutta universities.
 - O Vice-Chancellor of Andhra University and Banaras Hindu University.
 - Spalding Professor at Oxford University.
- Major Works: Indian Philosophy, The Hindu View of Life, Eastern Religions and Western Thought.
- **Diplomat:** Ambassador to the Soviet Union (1949–1952).
- Political Leader:
 - o First Vice-President of India (1952–1962).
 - o Second President of India (1962–1967).
- **Legacy:** His birthday (September 5) is celebrated as Teacher's Day in India.
- Awards: Bharat Ratna (1954), Knighthood by the British Government (title discontinued after independence).







Solar photovoltaic (PV) cells

Context

India's imports of solar photovoltaic (PV) cells from China jumped 141%.

What are Solar Photovoltaic (PV) Cells and How Are They Used in Solar Panels?

- PV cells are semiconductor devices (usually made of silicon) that convert sunlight directly into electricity via the photovoltaic effect.
- **Working Principle:** When sunlight (photons) strikes the PV cell, it excites electrons, creating an electric current if the photon energy exceeds the material's band gap.
- **Cell Construction:** A typical silicon PV cell contains p-type and n-type semiconductor layers forming a p-n junction, which produces electric potential when illuminated.
- Panel Assembly: Multiple PV cells are interconnected and encapsulated to form a solar panel/module. Several panels can be connected to make an array for higher electricity generation.
- **Use in Panels:** Solar panels are installed on rooftops or open fields to capture sunlight and supply electricity for homes, businesses, or the grid.

Infrastructural and Climatic Constraints on PV Systems in Tropical & Low-Income Regions

Infrastructural Constraints:

Unreliable Grid: Weak electricity grids can't always absorb or distribute generated solar power efficiently.

High Initial Costs: Although PV module prices have fallen, the cost of supporting infrastructure (mounts, wiring, inverters, installation) remains high.

Maintenance: Lack of trained technicians for installation, cleaning, and repairs.

Storage Limitations: Battery storage for nighttime or cloudy days adds cost and complexity.

Climatic Constraints:

High Temperatures: PV modules operate less efficiently at high temperatures (common in tropics).

Air Pollution & Dust: Pollution and dust reduce sunlight reaching the panels, lowering output (annual losses of 2–11% due to pollution, 3–4% due to soiling).

Humidity & Rainfall: High humidity may affect module durability, and excessive rainfall can cause damage or disrupt connections.

Sunlight Variability: Tropical regions may have intense, but also variable, solar insolation due to cloud cover or monsoons.

What is the Urban Heat Island Effect & How Might PV Installations Contribute?

Contribution of PV Panels:

- O PV modules absorb sunlight and convert only a part into electricity; the remainder is released as heat.
- O Large-scale PV installations can raise local temperatures, exacerbating the heat island effect in densely populated urban settings.



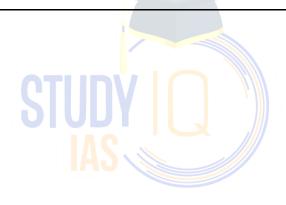
Major Solar Adoption Initiatives							
Scheme / Mechanism	Focus Area	Incentives/Target					
Surya Ghar: Muft Bijli Yojana	Rooftop residential solar	↑1 Cr homes, 300 units/month, ₹78 k subsidy					
PM-KUSUM Scheme (Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan)	Agricultural solar	Up to 60% subsidy; pumps + solar plants					
National Solar Mission	Utility + rooftop solar	100 GW target: 40 GW rooftop, 60 GW utility					





Also in News

- → Indian Railways launches new 'RailOne' app.
- → About the App
 - Combines multiple railway services (ticketing, inquiries, wallet, etc.) into a single app.
 - ◆ Users can log in using mPIN or biometric authentication.
 - ◆ Supports credentials from **RailConnect** and **UTSonMobile** apps.
 - ◆ Eliminates the need for multiple apps like IRCTC Rail Connect, UTS, Rail Madad, Food on Track, NTES.
 - ◆ Aims to provide a **clean, clutter-free interface** for comprehensive railway functionalities
- → A report published in PLoS Global Public Health, suggests that mothers **exposed to increased levels of PM2.5** had a **70% higher chance of delivering prematurely** compared to those who weren't exposed.
- → Prime Minister Narendra Modi was conferred with 'The Order of the Republic of Trinidad and Tobago', becoming the first foreign leader to receive the Caribbean country's highest civilian honour.





Editorial Summary

500% Tariff Bill in US: Impact on India

Context

US Senator Lindsey Graham is set to propose legislation that would impose a 500% tariff on US imports from countries that maintain trade relations with Russia.

Impacts of the Proposed US Bill on India

- Threat to Indian Exports: Indian goods exported to the US could become uncompetitive if subjected to a 500% tariff, severely affecting sectors like pharmaceuticals, textiles, gems & jewelry, and IT services.
- **Disruption of Supply Chains:** Indian businesses reliant on exports to the US may face contract losses, reduced orders, and supply chain disruptions.
- **Potential Retaliation:** India might be forced to consider counter-measures or diversify its export markets.
- **Strain Relations:** India's longstanding policy of balancing relations between the US and Russia will be severely tested, possibly leading to friction with either or both countries.
- **Defence & Energy Security:** Since India relies on Russia for critical defense hardware and energy imports, any reduction in ties could impact national security.
- Internal Divisions: The issue could fuel debate within India among pro-Russia (Russophiles) and pragmatic (Russoskeptic) camps, impacting policy decisions and public opinion.
- **Economic Costs:** Industries dependent on Russia for cheap oil or defense equipment may lobby to maintain ties, while export-driven sectors may push for realignment with US interests.
- **China Factor:** Weakening ties with Russia could push Moscow closer to China and possibly Pakistan, altering the strategic landscape in Asia to India's disadvantage.
- **Pressure on Strategic Autonomy:** India's pursuit of an independent foreign policy ("strategic autonomy") could come under strain, impacting its global diplomatic leverage.
- International Perception: India's stance on the Russia-Ukraine conflict will be under global scrutiny, affecting its reputation as a neutral, balancing power.
- **Risk of Economic Isolation:** If multiple countries join the US in imposing similar measures, India could face broader economic challenges.

Way Forward

- Intensify Diplomatic Engagements: Proactively engage with both the US and Russia to explain India's position, seek exemptions, and highlight the need for a pragmatic, multi-aligned foreign policy.
- **Diversify Trade & Energy Sources:** Accelerate efforts to diversify India's export markets and reduce overdependence on any single country for critical imports such as energy and defense equipment.
- **Strategic Policy Balancing:** Maintain a careful balance in relationships, ensuring neither the US nor Russia feels alienated, while safeguarding India's strategic and security interests.
- **Strengthen Domestic Manufacturing:** Invest in domestic capacity-building for defense and energy to reduce vulnerabilities stemming from external pressures or supply chain disruptions.
- Multilateral Collaboration: Work with other major economies and multilateral forums to build consensus on avoiding unilateral sanctions, promoting dialogue over punitive economic measures.