India Reaffirms Commitment to World Trade Organisation (WTO) Centered Fair Trade System

India emphasized on an open, fair, inclusive, and non-discriminatory multilateral trading system with WTO at its core during the SCO Trade Ministers' meeting.

About WTO (HQ: Geneva, Switzerland)

- Genesis: 1995 post the Marrakesh Agreement. Successor to the General Agreement on Tariffs and Trade (GATT).
- Members: 166 (India has been a member since
- Principles of WTO: Trade without discrimination, free trade through negotiation, promoting fair competition, etc.

Issues Facing WTO:

- > Public Stockholding (PSH): The stockholding programmes are considered to distort trade when they involve purchases from farmers at prices fixed by the governments (like MSP regime in India).
- > Special & Differential Treatment (S&DT): The special provisions which give countries (developing and Least Developed) special rights and allow other members to treat them more favourably.
- Developed nations argue to phase them out. **Dispute Settlement System:** Appellate Body (AB) of the WTO ceased to function in 2019 due to USA
 - blocking appointments and reappointment affecting resolution of trade disputes between countries.
- **Geopolitical Shifts:** E.g., USA tariff policies, Russia-Ukraine war.
- Others: Data privacy, data flows, taxation of digital services, climate change, EU's Carbon Border Adjustment Mechanism.



Need to build climate-resilient cities in India

Heavy monsoon rains and overflowing of rivers have caused severe urban flooding in cities of Punjab.

- Going forward, urban population in India is expected to nearly double from 480 million in 2020 to around 951 million by 2050.
- This highlights the need to build **climate-resilient cities in India**.

Key Challenges & Solutions for Indian Cities

- ▶ Flooding: By 2070, two-thirds of urban residents may face floods with \$30B losses.
 - Solution: Stronger drainage, nature-based solutions, flood warnings (e.g., Kolkata city based flood forecasting model).
- **Extreme Heat:** Urban heat islands raise temperatures by 3-5°C, affecting health and productivity.
 - Solution: Heat action plans, urban greenery (e.g., Ahmedabad's heat action plan).
- **▶ Transportation:** Flooding of 10–20% of roads can cripple >50% of networks.
 - Solution: Risk mapping, improved drainage, resilient and green public transport (e.g., Delhi Metro).
- Municipal Services: Waste management and energy recovery systems need major upgrades.
 - Solution: Modernise waste systems, expand waste-to-energy, improve environmental quality (e.g., Indore's waste management model).
- Governance & Finance: Weak institutional capacity and limited private investment.
 - Solution: Strengthen institutions, ensure citizen participation, and expand private sector financing.









India's Defence Theaterisation Plan

Differing opinions on India's proposed theaterisation plan were observed at Ran Samwad 2025.

What is Theaterisation?

- Theaterisation is a plan to integrate resources of the Army, Navy, and Air Force into specific geographical commands under a single, unified command structure.
 - It represents India's biggest post-Independence military restructuring, aiming to move away from the current system of 17 service-specific commands.
 - The Chief of Defence Staff, that heads the Department of Military Affairs (DMA) is mandated for establishment of joint/ theatre commands.

Challenges with Theaterisation

- IAF Reservations: Fearing the division of scarce combat assets would compromise its core doctrine and operational flexibility.
- India-Specific Model: There is caution against "blindly following" foreign models like the US, emphasizing the need for an **India-specific solution** tailored to its unique threats and requirements.
- Structural Disruption: Dismantling existing command structures is seen as a potentially disruptive impact on combat readiness during transition.
- Domain Knowledge & Command: Concerns exist regarding a theatre commander from one service effectively commanding and understanding the intricacies of another service's assets, particularly air power.
- Cost and Industrial Base: Skepticism about huge expenditure with doubtful returns and the absence of a robust domestic military-industrial complex.

Significance of Theaterisation



Streamline Forces

Reduce duplication, cut expenditure



Unity of Command

Faster decisions, optimal resources



Coordinated Military Operations

Jointness, efficiency in conflicts

Undersea Cables Targeted in the Red Sea

It led to internet outages in parts of the Middle East and Asia, including India, shedding light on India's Underwater Domain Awareness (UDA).

> UDA refers to the capability of a nation or an organization to monitor, detect, and assess activities occurring beneath the surface of water bodies like oceans and seas.

Need for UDA in India

- National Security and Regional Stability: (Eg China's Underwater Great Wall project).
- Protecting Critical Infrastructure: Such as submarine communication cables (which are fibre-optic cables), which transmit over 95% of global internet traffic.
 - Fibre optic cables transmit data as pulses of light through strands of glass or plastic fibres using the principle of total internal reflection.

Challenges for India

- Technological Gaps: The development of Unmanned Underwater Vehicles (UUVs) is at an early stage.
 - DRDO's phosphoric acid fuel cell-based Air Independent Propulsion (AIP) system for submarines compares poorly to lithium-ion fuel cell-powered AIP.
 - Bharat Electronics Limited's Unmanned surface vehicle (USV), designed for bathymetric surveys, has only a 30-kilogram payload capacity.
 - This results in import dependency for critical underwater equipment.
- ➤ Financial Constraints: Lack of long-term support to startups hinders the prototype development.
- Operational Difficulties: Due to India's vast coastline, Chinese submarine incursions, seasonal monsoons, and fragmented inter-agency coordination.

India's Initiatives

- Indigenous Development: Development of like MAYA, AMOGH, and ADAMYA, enhancing naval surveillance.
 - Matsya 6000 a manned submersible is being developed under Samudrayaan project.
- ➤ Infrastructure: Deployment of the Integrated Underwater Harbour Defence and Surveillance System (IUHDSS) in
- ▶ International Partnerships: cooperation with the US for co-developing autonomous undersea technologies and equipping MQ-9B Sea Guardian drones with sonobuoys.





GST Reform 2025 to Be Implemented from 22nd September

Next-Gen GST reforms build on GST's success with a simplified 2-tier structure (5% and 18%), fairer taxation, and digital filing for ease and faster refunds.

A new 40% tax rate has been introduced for luxury and sin goods like pan masala, cigarettes, etc.

Benefits of the Recent Changes

- **Social Protection:** Exemption of GST on insurance and essential medicines strengthens household security and access to healthcare.
- **Lower Prices, Higher Demand:** Cheaper goods and services increase household savings and stimulate consumption.
- Support for MSMEs: Reduced rates on inputs like cement, auto parts, and handicrafts lower costs and make small businesses more competitive.
- Ease of Living: A two-rate structure means fewer disputes, quicker decisions, and simpler compliance.
- Wider Tax Net: Simpler rates encourage compliance, expanding the tax base and improving revenues.

Key Challenges in Recent Changes

- Revenue Foregone: It could lead to a revenue loss of ~₹48,000 crore (on the FY23-24 consumption base), as per the Finance
- > Removal of Input Tax Credit (ITC): From goods such as healthcare products and insurance may lead to the problem of cascading taxes.
- Lack of clarity over revival of National Anti-profiteering Authority: It was initially set up for two years (that can be extended by the GST Council) to ensure businesses passed on the benefits of GST rate cuts to consumers.

Also in News



Total Lunar Eclipse (Blood Moons)

A total lunar eclipse that turned the moon blood red was witnessed across the globe.

About Total Lunar Eclipse

- An eclipse happens when a planet or a moon gets in the way of the Sun's light.
- A lunar eclipse occurs when the Sun, Earth, and Moon align so that the Moon passes into Earth's shadow.



- The entire Moon falls within the darkest part of Earth's shadow, called the umbra.
- When the Moon is within the umbra, it will turn a reddish hue, thus called Blood Moons.



Organization of the Petroleum Exporting Countries (OPEC+)

OPEC+ agreed to accelerate the Oil output. **About OPEC+**

- OPEC signed an agreement with 10 other oil-producing countries to create what is now known as OPEC+.
- OPEC and OPEC+ countries combined produced about 59% global oil production.
- Largest producer USA is not part of OPEC+.
- OPEC was formed in 1960 by Iraq, Kuwait, Saudi Arabia, and Venezuela.





Tea

Due to Increased imports, Assam Tea Industry is facing a crisis. About Tea as a crop

- Temperature: 18°C to 30°C. Extreme temperatures can adversely affect growth and yield.
- Rainfall: 1200 to 2500 mm. Adequate rainfall during the growing season is crucial.
- Humidity: High humidity levels (above 70%).
- Soil: Well-drained, acidic soils, rich in organic matter and have good water-holding capacity.
- Major Tea Growing Regions: Assam, West Bengal, Tamil Nadu, Kerala and Karnataka, Andhra Pradesh, Tripura, Himachal Pradesh,





Account Aggregator

India's account aggregator system now has 112 million users, according to the government.

- The Account Aggregator (AA) framework was launched in 2021.
- It is one of the country's fastest-growing pillars of Digital Public Infrastructure.

About Account Aggregator

- In India, they are entities licensed by the Reserve Bank of India
- They facilitate the collection and sharing of financial data.









Katchatheevu Island

Recently, the President of Sri Lanka visited Katchatheevu Island amid renewed calls by Indian politicians for its return to India.

Madurai

Sivaganga

Ramanatha

-puram

TAMILNADU

Rameshwaram

Katchatheevu

Pudukkottai

About Katchatheevu Island

- Location: It is a tiny, uninhabited island in Palk strait.
 - It lies to the northeast to Tamil Nadu's Rameswaram town and southwest of Sri Lanka's Jaffna city.
- The island is barren, with no drinking water or sanitation with St. **Anthony's Catholic Shrine** being the only permanent structure.



- island was disputed between India and Srilanka.
- ◆ In 1974, agreement was signed between both countries. delineating an International Maritime Boundary Line, which placed Katchatheevu on the Sri Lankan side.
- In return India gained Wadge Bank, located near Kanniyakumari.



Carbon capture and storage (CCS)

A new study warns of the limitations of **CCS to store carbon**. **About CCS**

- CCS processes capture carbon dioxide (CO2) emissions from industrial processes, power generation, and other sources, and then store them underground.
- Challenges:
 - Commercial: Expensive technology.
 - Storage: Capacity of underground geological formations to store CO2 is limited, and not all sites may be suitable for longterm storage.
 - Earth can only safely hold about 1,460 billion tonnes of CO2 underground.
 - Infrastructure: Cost of building and maintaining pipelines to transport can be high, and face public resistance.
 - CO2 Impact: Corrosion, degradation, leakage.



Protein Language Models

A team of researchers at MIT has developed a new technique to understand how language models predict protein structure and

About Protein language models (PLMs)

- PLMs are a type of large language model (LLM), adapted from natural language processing (NLP).
- Instead of words, they treat amino acids like tokens and proteins like sentences.
- By training on millions of protein sequences, they learn the grammar of proteins.
- This helps speed up drug and vaccine development by avoiding traditional, time-consuming lab experiments.



LANKA

Witness Protection Scheme, 2018

Recently The Supreme Court observed that the Witness Protection Scheme, 2018 cannot be treated as a substitute for not cancelling bails when conditions are violated.

About Witness Protection scheme 2018 Objective

- Ensure safety of witnesses and their families so they can testify freely without fear or intimidation.
- It aims to promote law enforcement by facilitating the protection of persons in providing assistance to criminal law enforcement agencies.



Personality in News



Sree Narayana Guru (1856-1928)

The Birth anniversary of Sree Narayan Guru celebrated.

He was a saint & social reformer of India.

Key Contribution

- ▶ He propagated the idea of 'One Caste, One Religion, One God'.
- He founded the 'Sree Narayana Dharma Paripalana Yogam' (SNDP) for upliftment and education of Ezhava community.
- He launched the "Aruvipuram movement", one of the first moments for equal rights to temple entry.
- He lent support to Vaikkom Satyagraha for temple entry (1924-25) in Travancore.
- Founded Ashram dedicated to principle Om Sahodaryam Sarvatra (all human beings are equal in the eyes of God).

Values

Equality, Non-violence, Compassion, Integrity, Courage etc.





























BENGALURU

BHOPAL

CHANDIGARH

DELHI

GUWAHATI

HYDERABAD

JODHPUR

LUCKNOW

PRAYAGRAJ

PUNE

RANCHI 4/4