

# NEWS TODAY

## 'Tariffs and India' Report released by GTRI (Global Trade Research Initiative)

It analyzes potential impact of **U.S. Reciprocal Tariff Plan** and proposes actions for Indian government and industry stakeholders to mitigate losses.

- U.S. Reciprocal Tariff Plan aims to counter trade imbalances by imposing higher tariffs on countries with which the U.S. runs a trade deficit.

### Impact of US Reciprocal Tariff Plan

- **On India:** Indian exports could face an additional tariff of 4.9% compared to the current 2.8%.
- **Sector-Level Impact:**
  - ⊖ **Agriculture:** Farm exports would be hit hardest, with shrimp, dairy, and processed foods facing tariffs of up to 38.2%.
  - ⊖ **Industrial Goods:** Major risks would be on **Pharmaceuticals, diamonds & jewelry, and electronics exports.**
    - ◆ E.g. Tariff differential on pharmaceutical sector to the tune of 10.90% may **increase costs for generic medicines** impacting **demand and reducing competitiveness**
- **Minimal Impact:** Petroleum, minerals, and garments may be unaffected.

### Recommendations

- **Make an advance tariff offer to the US, drop FTA plan:**
  - ⊖ India should propose a **zero-for-zero strategy** by identifying tariff lines where India can eliminate tariffs for U.S. imports without harming domestic industries
- **Adoption of Retaliatory Measures:** India should refuse unfair concessions and consider countermeasures, similar to China's response.
- **Reconcile large gap in the trade data as reported by India and the US:** to prevent tariff decisions based on inaccurate numbers.

## India's total installed Wind Capacity to Reach 63 GW by FY 27

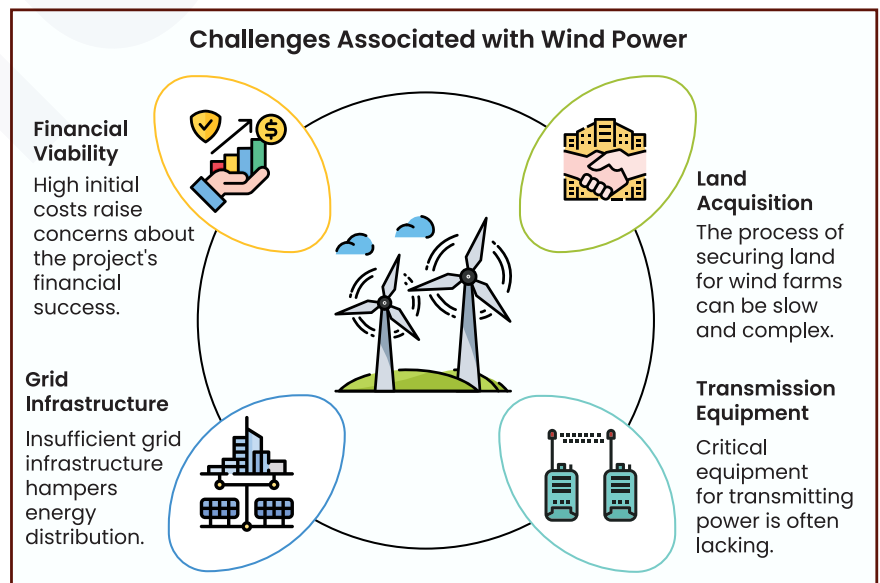
India's **annual wind power capacity addition** is set to **double** from ~3.4 GW in FY 24-25 to ~7.1 GW in FY 26-27 (Crisil Report).

### Wind Energy Status in India

- **Total Installed Wind Capacity:** It has **more than doubled**, in just over a decade, reaching **48.16 GW** (January 2025). Currently, India ranks **4th worldwide** in total installed wind capacity.
- **Role in Renewable Energy:** Wind power is the **second-largest** contributor to India's renewable energy mix, following solar power, which leads with **more than 100 GW**.
- **High Potential of Wind Power:** Gujarat, Maharashtra, Karnataka, Tamil Nadu, and Andhra Pradesh etc.

### Initiatives Undertaken to Promote Wind Energy

- **National Wind-Solar Hybrid Policy (2018):** Promotes hybrid projects combining wind and solar to optimize land use and grid stability.
- **Offshore Wind Energy Policy (2015):** Encourages offshore wind development, with identified potential along the Gujarat and Tamil Nadu coasts.
- **Green Energy Open Access Rules (2022):** Facilitates easier access to renewable power for consumers, boosting **wind energy adoption**.
- **Renewable Energy Purchase Obligation (RPO):** Mandates power distribution companies to source a portion of electricity from wind and other renewables.



## India's Space Economy Poised for Fivefold Growth

India's space economy is set to grow fivefold, significantly contributing to the nation's vision of Viksit Bharat 2047.

### India's Space Economy

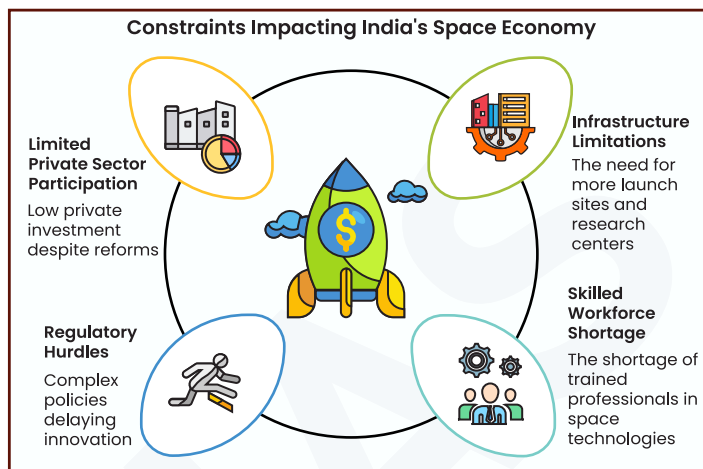
- **Current Status:** Indian space economy is valued at **\$8.4 billion**, accounting for **2% of the global space market**.
- **Contribution to Economy:** It contributed **₹20,000 crore** to GDP in the last decade and supported **96,000 jobs**.
  - ⊕ Every dollar in the space sector generates a **\$2.54 economic impact**, making it **2.5 times more productive than India's broader industry**.
- **Vision:** The government aims to capture 8% of the global space market by 2033, expanding the economy to \$44 billion.

### Space Technology's Role in Nation-Building

- **Land Digitization:** E.g., **Swamitva scheme** leverages satellites for transparent land records.
- **Resource Mapping:** Space tech aids in harnessing Himalayan & marine resources.
- **Women in Space:** Women make up 20-25% of ISRO's workforce, contributing to key missions like Chandrayaan.
- **Navigation & Communication:** ISRO's **NavIC** enhances national positioning & connectivity.

### Initiatives Undertaken

- **Space Budget:** Almost tripled from ₹5,615 crore in 2013-14 to ₹13,416 crore in 2025-2026.
- **Indian National Space Promotion and Authorization Center (IN-SPACe):** Established in 2020 to promote & oversee private sector involvement in space activities.
- **Other:** Indian Space Policy 2023, **100 % FDI**, 1,000 crore Venture Capital (VC) Fund etc.



## Nuclear weapons are 'one-way road to annihilation': UN Secretary-General

The warning also comes in the backdrop of **Doomsday Clock** moving one second closer to midnight last month.

- Introduced in 1947 by **Bulletin of the Atomic Scientists**, **Doomsday Clock is a symbolic representation of how close humanity is to self-destruction**.

### Current risks posed due to Nuclear Weapons

- **Heightened Global Security Concerns:** Geopolitical tensions, decrease in trust between nations, high military spendings increase the likelihood of nuclear conflict.
- **Erosion of Disarmament Frameworks:** Key treaties and norms against nuclear testing and proliferation are being undermined.
- **Nuclear Blackmail:** The threat of nuclear use to coerce opponents heightens global instability.
- **Expansion of inventories:** Countries are increasing their nuclear weapon inventories and new forms of arms races have emerged: E.g. in outer space
- **Weaponization of Artificial Intelligence:** It can reduce human control, raising the risk of unintended launches.

### Non-Proliferation efforts

- **Conference on Disarmament:** Its agenda includes nuclear disarmament, preventing an arms race in outer space, and addressing new weapons of mass destruction.
- **Treaty on the Non-Proliferation (NPT):** It aims to prevent the spread of nuclear weapons and weapons technology, to foster the peaceful uses of nuclear energy.
- **Comprehensive Nuclear-Test-Ban Treaty (CTBT):** It bans all nuclear explosions, whether for military or peaceful purposes.
- **International Atomic Energy Agency (IAEA):** It serves as the world's foremost intergovernmental forum for scientific and technical cooperation in the peaceful use of nuclear energy

## India's first Indigenous semiconductor chip to be ready for production by 2025

This marks a crucial step towards **reducing dependence on imports** and strengthening India's position in the global semiconductor industry.

- India's semiconductor manufacturing industry is still in its early stages & **heavily relies on other countries** like Taiwan, China etc. for semiconductor chips.
- Developing an indigenous chip will enhance **national security, reduce trade deficits, & boost domestic electronics industry**.

### India's Semiconductor Industry

- **Indian Semiconductor Market:** Estimated approximately **\$38 billion in 2023**, with projections indicating growth to **\$109 billion by 2030**.
- **Potential:** India's semiconductor consumption market is expected to grow at a strong compound annual growth rate (CAGR) of 13% through to 2030.

### Challenges

- **Capital-intensive Sector:** E.g., Setting up a semiconductor fab requires over \$10 billion.
- **Lack of Skilled Workforce:** India needs experts in semiconductor design, fabrication, and testing.
- **Dependence on Raw Material Imports:** Critical raw materials like silicon wafers, semiconductor chips etc. are imported.




### Initiatives Undertaken

- **Semicon India Program:** To **promote domestic semiconductor industry** through incentives and strategic partnerships.
- **India Semiconductor Mission:** To build a vibrant semiconductor & display ecosystem to enable India's emergence as a **global hub for electronics manufacturing and design**.
- **Partnerships with Global Firms:** Collaborations with companies like Micron, Foxconn to establish manufacturing units in India.

## Transforming India's judiciary and Law Enforcement with Artificial Intelligence (AI)

AI-powered technologies such as **Machine Learning (ML)**, **Natural Language Processing (NLP)**, **Optical Character Recognition (OCR)**, **Predictive Analytics** etc. are being leveraged to integrate AI into **judicial processes**, legal research, law enforcement.

### Role of Artificial Intelligence in Judiciary and Law Enforcement

	<p><b>Modernizing judicial functions through digital transformation</b></p>	<p>E.g. Phase III of <b>e-Courts Project</b>, integrates AI solutions to <b>enhance case management</b>, improve <b>legal research</b>, forecast potential delays and adjournments by using <b>predictive analytics</b>.</p>
	<p><b>Legal translation and language accessibility</b></p>	<p>&gt;<b>31,000 SC judgments have been translated into 16 regional languages</b> using AI-assisted tools.</p> <ul style="list-style-type: none"> <li>• <b>e-SCR (Electronic Supreme Court Reports)</b> portal hosts AI translated judgements.</li> </ul>
	<p><b>Law enforcement and crime prevention</b></p>	<p>AI is being integrated to enhance crime detection, surveillance, criminal investigations etc.</p> <ul style="list-style-type: none"> <li>• <b>Predictive policing:</b> AI models <b>analyze crime patterns, high-risk areas</b>, criminal behaviour etc., <b>enabling law enforcement agencies to take proactive measures</b>.</li> <li>• <b>Surveillance &amp; investigation:</b> Integration of Facial recognition system with national criminal databases; <b>AI-powered forensic analysis</b> to examine evidence, digital crime traits etc.</li> <li>• <b>Innovative solutions:</b> AI-assisted FIR filing using voice recognition, Augmented Reality (AR) applications for crime scene investigations.</li> <li>• <b>Others:</b> Integration of <b>Crime and Criminal Tracking Network Systems (CCTNS)</b>, <b>e-Prisons</b>, e-Forensics databases.</li> </ul>

The future of AI in law and justice will be shaped by AI-powered legal research, blockchain-secured case records, judicial transparency through AI analytics, and enhanced cybersecurity in law enforcement.

## Also in News



### International Mother Language Day

The **25th anniversary of International Mother Language Day** celebrated on February 21.

#### About International Mother Language Day

- It is observed on **February 21** each year since 2000.
- The idea to celebrate International Mother Language Day was the initiative of **Bangladesh**. It was approved at the **1999 UNESCO** General Conference.
- Purpose:** Promotes inclusion, **multilingual education**, and preservation of minority and indigenous languages.
  - ☉ Globally 40% of the population does not have access to an education in a language they speak or understand.



### Bureau of Energy Efficiency (BEE)

Bureau of Energy Efficiency (BEE) organized **1st international conference on Carbon Markets – PRAKRITI** (Promoting Resilience, Awareness, Knowledge, and Resources for Integrating Transformational Initiatives) **2025**.

- It **aims** to provide an **understanding of Indian Carbon Market**, insights into the **global carbon market's dynamics** etc.

#### About Bureau of Energy Efficiency (BEE)

- Genesis:** Energy Conservation (EC) Act, 2001.
- Objective:** Reducing energy intensity of the Indian economy.
- Vision:** To improve Energy Intensity of Indian Economy thereby contributing towards sustainable development of country.
- Mission:** To **develop policies & strategies with a thrust on self-regulation & market principles**, within overall framework of EC Act, 2001.



### Svalbard Global Seed Vault

The Svalbard Global Seed Vault also known as Arctic doomsday seed vault gets more than 14,000 new samples.

#### About Svalbard Global Seed Vault

- Location: Norwegian Arctic Island
- Ownership and Management:** owned by Norway and managed in partnership between the Norwegian Ministry of Agriculture and Food, the regional genebank NordGen and the Crop Trust.
- Significance:** safe, free and long-term storage of seed duplicates from all genebanks, serve as a back up in case of **nuclear war, human conflict, climate change** etc.
- Working:** low temperature (-18°C), permafrost and thick rock ensures that the seed samples will remain frozen even without power.
- Key Contribution:** Restored seed collections lost in the Syrian war.



### SWAYATT Initiative

SWAYATT initiative on Government e Marketplace (GeM) celebrates 6 years of transformative impact.

- GeM is an online platform** offering end-to-end solutions for **procurement of common use goods and services by government buyers**.

#### About SWAYATT Initiative

- It stands for **Startups, Women & Youth Advantage through eTransactions Initiative**
- Genesis:** Launched in 2019 on GeM.
- Objective:** To invigorating participation of women-led enterprises and youth in public procurement.
- Initiatives:** **Startup Runway and Womaniya** storefronts ensure wider visibility of startups, women entrepreneurs and youth among lakhs of pan-India government buyers.





### SPHEREx Space Telescope

NASA is set to launch **SPHEREx Space Telescope** using the SpaceX Falcon 9 rocket.

#### About SPHEREx Space Telescope (Observatory)

- It stands for **Spectro-Photometer for the History of the Universe, Epoch of Reionization and Ices Explorer**.
  - ⊖ It will **collect data from 450 million galaxies & 100 million stars in Milky Way**.
- **Objective:** Survey the sky in **optical & near-infrared light**.
- **Tenure:** 2 years.
- **Aim:**
  - ⊖ **Look for the origin of the universe while mapping the distribution of galaxies.**
  - ⊖ **create a 3-D map of the cosmos in 102 colors** (individual wavelengths of light)
  - ⊖ **gain insight about cosmic inflation, a phenomenon marked with rapid and exponential expansion of the universe from a single point in a fraction of a second after the Big Bang.**



### Biodiversity Leak

Recent study finds that Conservation efforts in wealthy nations may worsen biodiversity loss in other countries.

#### About Biodiversity Leak

- Biodiversity leak refers to the **unintended loss of biodiversity** in one region due to conservation or environmental policies that shift environmental harm elsewhere.
- **Impacts of Biodiversity Leak:** Loss of Global Biodiversity, Threats to Endangered Species, Climate Change Acceleration etc.



### Algal bloom

The recent study warns that **Climate change is set to increase algal blooms in England's Thames river.**

#### About Algal bloom

- **Definition:** An algal bloom is the **overgrowth of microscopic algae** or algae-like bacteria in fresh, salt, or brackish waters.
  - ⊖ Algal blooms can be of many colors, including blue-green, yellow, brown, pink, and red.
- **Types**
  - ⊖ **Cyanobacteria (Blue-Green Algae):** The most common type of harmful algal bloom appears in freshwater lakes, ponds, & rivers.
  - ⊖ **Golden Algae (Prymnesium parvum):** Primarily found in oceans but increasingly affecting freshwater bodies.
    - ◆ Unlike cyanobacteria, **not known to harm humans.**



### Time Use Survey (TUS)

Recently, **National Statistics Office (NSO)** released the 2nd **Time Use Survey (TUS)** for the year 2024.

#### About Time Use Survey (TUS)

- **Purpose:** It **provides a framework for measuring time dispositions** by the population on different activities.
- **Objective:** To **measure the participation of men and women in paid and unpaid activities.**
- **Key findings**
  - ⊖ **Increase in women participation in employment related activities (paid activities).**
  - ⊖ There is increased **acknowledgement of caregiving activities regardless of gender** within Indian families.
  - ⊖ **Time spent in Culture, leisure, mass-media and sports practices has increased in both men and women.**

## Place in News



### South Korea

#### South Korea (Capital: Seoul)

Birth rate of South Korea in 2024 has risen for first time in 9 years

#### Political features

- **Location:** East Asia
- **Boundaries:** North Korea (North) along the **38th parallel**
- **Maritime Boundary:** East Sea (Sea of Japan) to the East, Yellow Sea (West)

#### Geographical features

- **Mountains:** **Taebaek Mountains** are stretched along the eastern coast.
- **Islands:** Jeju island and Ulleung Island
- **Rivers:** Han river



AHMEDABAD



BHOPAL



CHANDIGARH



DELHI



JAIPUR



JODHPUR



GUWAHATI



HYDERABAD



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI



SIKAR