

India's Manufacturing Export Strengthens as Merchandise Trade Stabilizes

Merchandise exports grew 2.52% to US\$184.13 billion in April–August 2025 from US\$179.60 billion a year earlier.

Manufacturing Performance

- **Strong Growth Momentum:** The Index of Industrial Production (IIP) surged to 3.5% Year-on-Year (YoY) in July 2025, primarily led by 5.4% YoY manufacturing growth.
- **Operating Conditions Improve:** The HSBC India Manufacturing Purchasing Managers' Index (PMI) reached 59.3 in August 2025, the fastest growth in over 17 years.
- **Investment Confidence:** Manufacturing Foreign Direct Investment (FDI) accelerated 18% in FY 2024-25.

Engines of Growth for Manufacturing

- **Electronics Dominance:** India is the world's second-largest mobile manufacturer. Production has seen a sixfold rise and exports an eightfold surge over the past 11 years.
 - ⊕ Dependence on imported mobile phones has dropped from 75% in 2014-15 to 0.02% in 2024-25.
- **Pharmaceuticals ("Pharmacy of the World"):** The industry ranks 3rd globally by volume and supplies over 50% of global vaccine demand.
- **Automotive Sector:** Contributes 7.1% to India's GDP and is the fourth-largest automobile producer globally.
- **Textiles:** It is the second-largest employer after agriculture, contributing around 2.3% to GDP. Nearly 80% of its capacity lies in MSME clusters, ensuring inclusive growth.

Government Initiatives and Policy to Boost Manufacturing

- **Production Linked Incentive (PLI) Scheme:** It covers 14 key sectors and provides incentives based on incremental production.
- **National Manufacturing Mission (NMM):** Announced in the Union Budget 2025–26, serves as a long-term strategic roadmap for industrial policy.
- **Skill India Programme:** The restructured program, extended until 2026 focuses on building a demand-driven, technology-enabled workforce.
- **GST 2.0 Reforms:** These reforms simplify the tax structure and have reduced GST to cut manufacturing costs and boost export competitiveness.

Ministry for Commerce and Industry launched Key Initiatives for Logistics Sector

These key initiatives include:

Assessment of Logistics Cost in India Report

- Prepared by the National Council of Applied Economic Research (NCAER), it estimates logistics costs in India at about 7.97% of total GDP in FY 2023-24.
- Total logistics cost is estimated at 24.01 lakh crore in FY 2023-24 with road transport forming the major component (41.7%), followed by storage and warehousing.

Integrated State and City Logistics Plans

- Initiated under SMILE (Strengthening Multimodal and Integrated Logistics Ecosystem) Programme in collaboration with the Asian Development Bank (ADB).
 - ⊕ SMILE Programme aims to establish and operationalize a comprehensive policy framework to enhance logistics efficiency.
- **Aim:** This exercise initiated with eight cities across eight states will help assess existing logistics infrastructure, identify gaps, and provide a roadmap for improving efficiency and reducing costs.

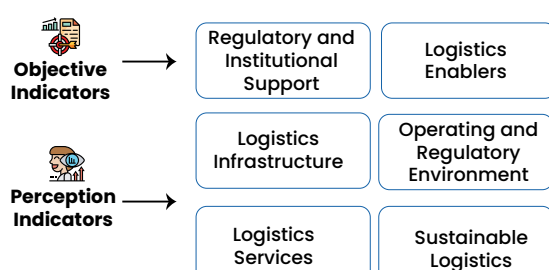
Logistics Data Bank (LDB) 2.0

- LDB 2.0 enables enhanced real-time tracking of container movements, introducing export container tracking on high seas along with multi-modal shipment visibility.
- Developed by NICDC (National Industrial Corridor Development Programme) Logistics Data Services (NLDSL).

Logistics Ease Across Different States (LEADS) 2025

- Developed on lines of World Bank's Logistics Performance Index, LEADS analyzes logistics performance across States and Union Territories.
- LEADS 2025 introduces two major features:
 - ⊕ Performance assessment of 5–7 key corridors based on journey time, truck speed, and waiting periods, and
 - ⊕ API-enabled evaluation of section-wise speeds on major road corridors.

LEADS 2025 Framework



World's Largest Neutrino Detector Activated Underground

The detector, known as the **Jiangmen Underground Neutrino Observatory, or JUNO**, is located in **China**.

- The observatory is situated **700 meters underground**.
 - ⊕ Most of the neutrino observatories are underground, as the physical bulk of the Earth's crust helps **block most other interfering particles**, like muons (elementary subatomic particles similar to the electron).
- **Main Goals of the JUNO**
 - ⊕ **Mass Hierarchy:** To determine the hierarchy of masses between the three neutrino types.
 - ◆ The three neutrino types are **Electron neutrino, Muon neutrino, and Tau neutrino**, each linked to their respective particles.
 - ⊕ **Oscillation Frequency:** To measure the frequency of neutrino oscillation (how often the neutrino types shift, or change, from one type to another).

About Neutrinos

- **Nature:** Subatomic particles (often called **ghost particles**) that have zero electrical charge, zero size and tiny mass.
- **Occurrence:** **Second-most abundant particle after photons** (particles of light) and most abundant among particles found in the universe.
- **Detectability:** Difficult to detect as they only interact with matter via **weak nuclear force and gravity**.
- **Features:** Undisturbed by even the strongest magnetic field, Travel in straight lines from their source, Travel at nearly the speed of light, etc.

Other Key Neutrino Observatories

- **India-based Neutrino Observatory (INO):** Jointly funded by the Department of Atomic Energy (DAE) and the Department of Science and Technology (DST).
 - ⊕ **Location:** Bodi West hills of Theni District of Tamil Nadu.
- **IceCube Neutrino Observatory:** It is the first detector of its kind, designed to observe the cosmos from deep within the South Pole ice.
- **Others:** **China's TRIDENT** (Tropical Deep-sea Neutrino Telescope) and **US's DUNE** (Deep Underground Neutrino Experiment).

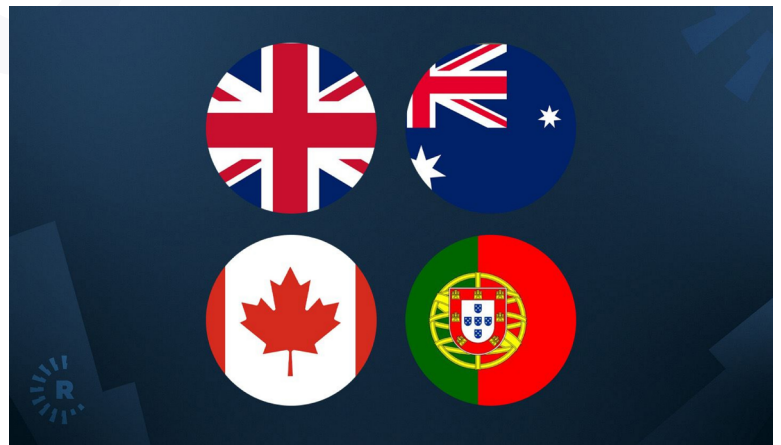
Palestinian State Recognised By United Kingdom, Canada, Portugal and Australia

The four western nations joined over **140 UN member states** in recognizing **Palestine** as a state.

- India recognized the **Palestinian State in 1988**:
 - ⊕ Recently, India voted in favour of a **resolution in the UN General Assembly** endorsing the '**New York Declaration**' on the **peaceful settlement and implementation** of the **Two-State Solution**.

Recognition of States

- The process in which a **state acknowledges another entity** as a state is known as recognition.
- **Article 1 of the 1933 Montevideo Convention on the Rights and Duties of States defines the criteria for statehood:** Permanent population, definite territory, government and capacity to enter into relations with other states.
- **Effects of State Recognition:**
 - ⊕ It acquires the **capacity to enter into diplomatic relations** with other states.
 - ⊕ It acquires the **capacity to enter into treaties** with other states.
 - ⊕ The state is able to **enjoy the rights and privileges** of international statehood.
 - ⊕ The state can become a **member of the United Nations organisation**.
 - ◆ Palestine is a UN "**Permanent Observer State**," not a full member.



Recognition by United Nations

- The recognition of a new State or Government is an act that **only other States and Governments may grant or withhold**.
 - ⊕ The United Nations is **neither a State nor a Government**, and therefore does not possess any authority to recognize either a State or a Government.
- The UN may **admit a new State to its membership** or accept the credentials of the representatives of a new Government.

Global Climate and Health Alliance (GCHA) releases report on health toll of fossil fuels

Report titled 'Cradle to Grave: The Health Toll of Fossil Fuels and the Imperative for a Just Transition' highlights that fossil fuels are not just an environmental threat but a public health emergency.



Health Impacts of Fossil Fuels

- **Fossil fuel pollution affects all life stages**, from foetal development to old age, causing asthma, cancer, cardiovascular diseases, etc.
- **Every stage of fossil fuel use**: extraction, refining, transport, combustion, and disposal-releases **persistent toxic pollutants**, damaging ecosystems and human health.
 - ⊕ **Extraction** releases benzene, heavy metals, radioactive materials while **refining and processing** releases toluene, Volatile Organic Compounds (VOCs), etc.
- **Legacy pollution** from abandoned sites leads to long-term health risks as chemicals like **lead, mercury, and PFAS (forever chemicals)** persist in soil, water, and the food chain, intensifying with each exposure (biomagnification).
- **Marginalized groups** including indigenous peoples, racial minorities bear disproportionate burdens living near mines, refineries and facing systemic barriers to healthcare.

Policy Recommendations for Just Transition

- **Ending new fossil fuel exploration** and development, **phasing out subsidies** and redirect savings toward health and clean energy.
- Enforcing **strict regulations, real-time monitoring**, and remediation of legacy pollution.
- Internalizing health costs through the **"Polluter Pays" principle**.
- Aligning global financial institutions and the health sector with climate and public health goals.

Ministry of Finance has given infrastructure status to Large Ships

Large ships are now included in 'Transport and Logistics' category of the Infrastructure **Harmonized Master List (HML) of Infrastructure Sector**, aimed to strengthen domestic shipbuilding and maritime industry.

- **A large ship** is defined as Commercial Vessel:
 - ⊕ Having a Gross Tonnage (GT) of 10,000 or more, under the Indian ownership and flag; or
 - ⊕ Having a GT of 1,500 or more which are **built in India** and are under Indian ownership and flag.
- **Significance of Inclusion in HML**: Access to infrastructure lending at easier terms with enhanced limits, access to larger amounts of funds as external commercial borrowings (ECB), viability gap funding, tax incentives, etc.

Status of India's Shipping Sector

- **Foreign Dependence**: **95% of India's trade relies on foreign ships** and India pays nearly \$75 billion every year to foreign shipping companies for shipping services.
- **Share in Shipbuilding**: India currently accounts for only **0.06% of global shipbuilding**.
- **Target**: Government is aiming at becoming **one of the top five shipbuilding nations by 2047** and according to Maritime Amrit Kaal Vision 2047, government foresees an investment of **₹54 trillion into building indigenous shipping and shipbuilding capabilities** by 2047.
- **Issues in Shipping Sector**: Capital constraints with high borrowing costs, ageing fleet, tax anomalies, skill gaps, etc.

Planned Initiatives for Strengthening Shipping Sector

- Establishment of **Bharat Container Shipping Line** under the Shipping Corporation of India (SCI).
- Establishment of **Coastal Green Shipping Corridor** with Kandla-Tuticorin corridor being the first to be developed.
- Launch of **Sagarmala Startup and Innovation Initiative (S2I2)** along with establishment of **Maritime Innovation Hubs (MIHs)**.

Also In News



Industrial Parks Rating System (IPRS) 3.0

The Union Ministry of Commerce and Industry launched IPRS 3.0.

About IPRS 3.0

- Under IPRS 3.0, **industrial parks will be benchmarked** and categorized as Leaders, Challengers, and Aspirers based on their performance across key indicators.
- **Developed by**: Department for Promotion of Industry and Internal Trade (DPIIT) with support from the Asian Development Bank (ADB).
- **Key Additions**: New parameters, including sustainability, green infrastructure, logistics connectivity, digitalization, skill linkages, and enhanced talent feedback.



Project Vijayak

Project Vijayak of the Border Roads Organisation (BRO) celebrated its 15th Raising Day at Kargil, Ladakh.

About Project Vijayak

- **Raised in 2010** and entrusted with the responsibility of **providing road connectivity** in the areas of **Kargil and Zaskar**, which previously were under Project Himank.
- The Project drew its name from **Operation Vijay** (Kargil War) of 1999.
- It played a significant role in strengthening the security infrastructure along the Line of Control.

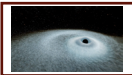


Bagram Air Base

United States is in talks with Afghanistan to regain the control of the Bagram Air Base in Afghanistan.

About Bagram Air Base

- The **largest air base in Afghanistan** located **north of the capital Kabul**.
- **Originally built by the Soviets in 1950s** and after Soviet withdrawal in 1990s, it became a frontline in war between Taliban and Northern Alliance fighters.
- After 2001 terror attack on USA, it became the **centre of US operations** in their war against terror in Afghanistan.
- US and NATO troops **pulled out** of Bagram in 2021.



Extreme Nuclear Transients (ENTs)

Astronomers identified a new category of events: Extreme Nuclear Transients (ENTs).

About ENTs

- ENTs occur when **stars with masses at least three times greater** than that of the sun are torn apart by supermassive black holes.
- As a **star nears a black hole's event horizon**, extreme tidal forces stretch and compress the star into a long, thin spaghetti-like shape, releasing enormous amounts of electromagnetic energy. This emission is the ENT.



Sawalkote Project

The Expert Appraisal Committee of the Environment Ministry will appraise Sawalkote Project for grant of environmental clearance

About Sawalkote Project

- It is a run-of-the-river project proposed **on the river Chenab**.
- **Location:** District Ramban & Udhampur of UT Jammu & Kashmir.
- **Implementing Agency:** National Hydroelectric Power Corporation (Government of India Mini Ratna Category-I Public Sector Enterprise under the Ministry of Power).



Smog Eating Technology

Delhi Government ordered study of the use of **Smog Eating photocatalytic coatings** on roads.

About Smog Eating photocatalytic coatings

- **Objective:** Reduce nitrogen dioxide (NO₂) and harmful hydrocarbons in public spaces, improving air & water quality.
- **Mechanism:**
 - ⊖ **Photocatalytic Activity:** Uses light energy to break down harmful pollutants & organic waste into harmless matter.
 - ◆ Usually uses **titanium dioxide (TiO₂)** coatings as photocatalysis under UV light to decompose NO_x.



Swell Waves

A study finds that without Sri Lanka's landmass, **Southern Ocean Swells** could hit India's east coast, causing **flooding and erosion**.

About Swell Waves

- **Long-wavelength ocean waves** that travel long distances away from their origin.
- They are generated mainly by **windstorms / strong air currents**.
- They are largely unaffected by local winds or currents and often go **undetected by satellites** due to their low frequency and lack of surface whitecaps.
- They are also called **Kallakkadal waves in India**.
 - ⊖ The term has now been approved for scientific use by **UNESCO**.



Dadasaheb Phalke Award

The Ministry of Information and Broadcasting announced the winner of the Dadasaheb Phalke Award for the year 2023.

About Dadasaheb Phalke Award

- It is an **annual award** given by the **Indian government** for **lifetime contribution to Indian cinema**.
- It is India's **highest honor in cinema**, and is presented by the President of India to individuals.
- **Instituted: In 1969**, the birth centenary year of Dadasaheb Phalke, considered the father of Indian cinema.
- **First Recipient:** Devika Rani.

Place in News



Baltic Sea

Germany deployed fighter jets after a Russian military aircraft entered Baltic Sea Airspace.

About Baltic Sea

- **Location:** **North Atlantic Ocean**, extending north from southern Denmark to near Arctic Circle.
- **Surrounding Countries:** Denmark, Sweden, Finland, Russia, Estonia, Latvia, Lithuania, Poland, Germany.
- **Features:**
 - ⊖ It is the **youngest sea on our planet**.
 - ⊖ **Largest expanse of brackish water** in the world; semi-enclosed & shallow.
 - ⊖ **Kiel Canal** (Germany) links the Baltic with the North Sea.
 - ⊖ Gulf of Bothnia, Gulf of Finland, and the Gulf of Gdańsk are **important gulf**.

