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Industrial growth quickens to 8% in Aug.

The growth in August is the second-highest for the period going back to April 2024, for which the new series of the IIP has data

T.C.A. Sharad Raghavan

NEW DELHI

Industrial growth in India quickened to 8% in August 2026 from 7.35% a month earlier, driven by a strong performance in the manufacturing, electricity, capital goods, and consumer goods sectors.

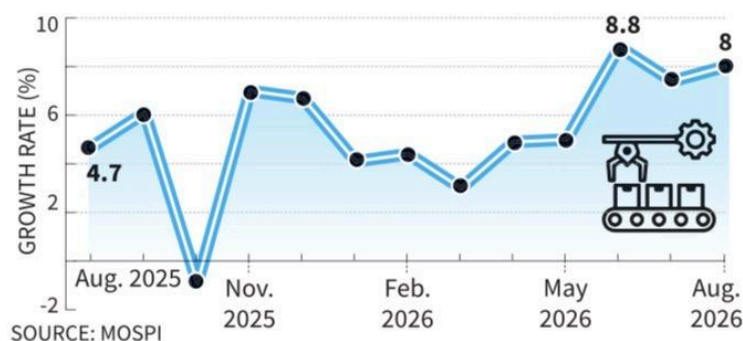
Growth in the Index of Industrial Production, data on which was released by the Ministry of Statistics and Programme Implementation on Monday, was last quicker in June 2026 when it touched 8.8%.

The growth in August is the second-highest for the period going back to April 2024 for which the new series of the IIP has data.

"This [August growth] was aided by sharp growth in capital goods, intermediate, infrastructure, and consumer durable goods," Madan Sabnavis, chief economist at the Bank of Baroda said. "For the five

Growth uptick

India's industrial growth in August 2026 is the second-highest since April 2024, the earliest period for which there is data



months period, growth was at 6.7%," Mr. Sabnavis added. "If this is maintained, India can register growth of 7-8% for the year on the back of higher growth during the festival season with demand building up. This makes the third quarter very critical for industry." The manufacturing sector grew at 8.95% in August 2026, the second-highest in the history of the new series of the IIP after the 9.5% seen in June 2026. A deeper look showed that the

growth in the sector was driven by motor vehicles, electric and non-electric machinery, electronics, textiles, beverages, rubber, and non-metallic products.

The electricity sector saw growth quicken to a 27-month-high of 12.3% in August 2026, which, according to Mr. Sabnavis, was supported by growth in both conventional and renewable electricity.

The capital goods sector grew by 16.9%, which was however a three-month low.

1. Industrial Growth Quickens to 8% in August

Source: The Hindu

GS-3: Indian Economy | Industrial Growth | Manufacturing | Investment

Context

India's industrial growth accelerated to **8% in August 2026**, from **7.35% in July**, making it the **second-highest growth rate since April 2024** under the new IIP series. The rise was supported by manufacturing, electricity, capital goods and consumer goods.

1. Basics of Index of Industrial Production (IIP)

1. **Meaning:** IIP measures the monthly change in the **volume of industrial production** relative to a base year.
2. **Released by:** **National Statistical Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI).**
3. **Core sectors:** It covers **Mining, Manufacturing and Electricity**, with manufacturing having the largest weight.
4. **New Base Year:** The base year has been revised from **2011–12 to 2022–23**, with **2022–23 = 100**.
5. **New Series:** Introduced in **2026**, it updates the industrial basket, weights, data sources and methodology to reflect structural changes in the economy.
6. **Expanded Coverage:** The revised series includes a broader range of contemporary industrial activities, making IIP more representative of present-day production.

2. Key Trends — August 2026

1. **Overall IIP:** Growth rose to **8%**, indicating stronger industrial momentum.
2. **Manufacturing:** Grew **8.95%**, supported by automobiles, machinery, electronics, textiles and other manufacturing segments.
3. **Electricity:** Registered **12.3% growth**, a **27-month high**, reflecting strong power demand and generation.
4. **Capital Goods:** Grew **16.9%**, pointing towards continued investment-related demand, although growth moderated compared with the previous month.
5. **Consumer & Intermediate Goods:** Both recorded healthy expansion, indicating strengthening consumption and production demand.

3. What the New Industrial Trend Indicates

1. **Broad-Based Expansion:** Industrial growth is spread across **manufacturing, electricity, capital goods and consumer goods**, rather than being driven by one sector.
2. **Manufacturing-Led Momentum:** Strong manufacturing growth indicates that the industrial recovery is increasingly anchored in productive capacity.
3. **Investment Support:** High capital-goods growth suggests that demand for machinery and productive assets remains strong.
4. **Consumption–Investment Linkage:** Simultaneous growth in consumer and capital goods indicates support from both **consumption and investment demand**.
5. **Energy–Industry Linkage:** Strong electricity growth reflects rising economic activity while also enabling further industrial expansion.

4. Significance for the Economy

1. **GDP Growth:** Sustained industrial expansion can strengthen overall economic growth.
2. **Private Investment:** Continued capital-goods demand can support a broader investment cycle.
3. **Employment:** Expansion of manufacturing and allied industries can create more non-farm employment.
4. **Competitiveness:** Greater domestic manufacturing capacity can strengthen India's value chains and export potential.
5. **Structural Transformation:** Sustained manufacturing and investment growth can help shift the economy towards higher-productivity activities.

Tackling food loss and waste — India's opportunity

Food loss and waste remain one of the world's most persistent challenges, with severe consequences for climate, food security, economic costs, and sustainable use of natural resources. India produces enough to feed its population of 1.4 billion, yet a significant share of its produce is lost across the value chain. As the country advances towards more resilient, sustainable and efficient agrifood systems, tackling food loss and waste can deliver a triple win: strengthening food security and nutrition, reducing pressure on natural resources and emissions, and improving incomes and productivity. The International Day of Awareness of Food Loss and Waste, observed annually on September 29, highlights this opportunity for India.

India has already taken the first step by generating nationally representative data.

India's evidence base, a global first

India is the only country to have conducted three national post-harvest loss surveys. The Ministry of Food Processing Industries assessed losses across 45, 45 and 54 commodities in 2005-07, 2012-14 and 2020-22, respectively, covering the supply chain from farm to retail. The process for a fourth round is now under way.

This sustained effort supports its reporting of the Food Loss Index under the Sustainable Development Goals. However, these estimates cover mainly losses on the farm and in the supply chain. Data on food waste in retail, in hotels and restaurants, and at household level remains far less developed.

The Food and Agriculture Organization of the United Nations (FAO) is working with the government, research and financial institutions



Konda Reddy Chavva

Officer-in-Charge, FAO Representation in India

Cutting food losses can strengthen food security, conserve resources and advance climate goals

across India's agrifood systems to translate the triple win from theme to practice. Generating evidence, testing technologies and mobilising investment from farm to market to the city have been the core of these initiatives.

When food is lost, so are the resources used to produce it. Reducing losses can help India meet its climate and resource-efficiency goals while strengthening food security. The scope for reducing losses is greatest with better storage, drying, cooling, moisture management and processing. Digital tools such as traceability systems can further improve how food is moved and managed through the supply chain.

Food loss and waste need to be integrated more systematically into agricultural planning, food-processing strategies, climate action and investment decisions. This means directing finance towards technologies and infrastructure where they can have the greatest impact, while ensuring that solutions remain affordable and accessible to farmers, producer organisations and small businesses. Circular approaches can add another dimension. Surplus food can be redistributed, while unavoidable organic residues can be converted into compost, biogas or energy, reducing waste and creating additional economic value.

Wholesale markets, overlooked opportunity

Assessments by the FAO and the National Council of Agriculture Marketing Boards (COSAMB) have found that major wholesale markets can generate up to 100 tonnes of organic waste a day; in some cities as much as a fifth of all urban organic waste reaches landfills. Nationally, this adds up to an estimated 3.5 million tonnes a year. It is no waste stream but a resource base, which if treated, can

offset roughly 3.3 million tonnes of CO₂-equivalent emissions annually, or close to \$30 million in carbon credits.

A 50-tonne-a-day bio-CNG plant in Surat, Gujarat, has been run through a private-sector partnership for over five years and reportedly cuts methane-related emissions by about 7,500 tonnes a year.

India can adapt such models to local conditions, including the commodity mix and infrastructure of different markets. Municipalities and market committees can also improve organic-waste segregation, collection and treatment, while developing markets for compost, biogas and other recovered materials.

Investment and innovation

India must move from individual interventions to a more connected national approach with financing at its core. The FAO and the Small Industries Development Bank of India (SIDBI) are linking identified food-loss hotspots with climate-resilient technologies such as drying, moisture control, energy-efficient cooling and storage, while SIDBI is arranging finance to help small and medium enterprises adopt them.

The FAO is also working to equip Indian cities with a practical "Package of Practices" for urban food loss and waste management, giving municipalities the tools to measure, prevent, reduce, redistribute and valorise waste across households, wholesale markets, retail and food service.

India now has the data, technology and viable models to reduce food loss and waste. The priority is to close data gaps, direct investment and make loss reduction part of agricultural, food-processing, urban and climate policy.

17. आप इस मत से कहाँ तक सहमत हैं कि भूख के मुख्य कारण के रूप में खाद्य की उपलब्धता में कमी पर फोकस, भारत में अप्रभावी मानव विकास नीतियों से ध्यान हटा देता है? (उत्तर 250 शब्दों में दीजिए)

How far do you agree with the view that the focus on lack of availability of food as the main cause of hunger takes the attention away from ineffective human development policies in India? (Answer in 250 words) 15

2. Tackling Food Loss and Waste — India's Opportunity

Source: The Hindu

GS-3: Agriculture | Food Security | Environment | Sustainable Development

Context

Food loss and waste is not merely a waste-management issue; it affects **food security, farmer incomes, resource efficiency and climate action**. India's latest nationally commissioned **NABCONS study**, covering 54 commodities across 15 agro-climatic zones and 292 districts, provides the most comprehensive recent evidence on post-harvest losses.

1. India's Food-Loss Profile

1. **Perishables face the highest losses:** Fruits record **6.02–15.05%** and vegetables **4.87–11.61%** losses, compared with **3.89–5.92% for cereals**.
2. **Other commodities:** Losses range from **5.65–6.74% in pulses** and **2.87–7.51% in oilseeds**; plantation crops and spices record **1.29–7.33%**.
3. **Physical scale:** Annual losses include approximately **12.49 million tonnes of cereals**, **7.36 million tonnes of fruits** and **11.97 million tonnes of vegetables**.
4. **Economic scale:** These translate into estimated losses of about **₹26,001 crore in cereals**, **₹29,545 crore in fruits** and **₹27,459 crore in vegetables**.
5. **Fisheries:** Recent government-supported assessments continue to identify significant post-harvest losses; for example, marine-fish losses in Karnataka have been estimated at **6.21–10.13%**.

2. Where Does Food Loss Occur and Why?

1. **Harvesting:** Poor harvesting practices and mechanical damage contribute substantially; **paddy loses 4.16% and wheat 3.61% during farm operations**.
2. **Storage:** Inadequate scientific storage, moisture control and temperature management particularly affect **perishable commodities**.
3. **Transportation & Markets:** Poor packaging, handling and transport increase damage; market-level losses include **2.40% for banana** and **3.25% for tomato**.
4. **Processing & Value Addition:** Insufficient processing capacity means surplus or damaged produce cannot always be converted into higher-value products.
5. **Infrastructure & Skills:** The NABCONS study specifically identified gaps in **infrastructure, technology and skills** as important constraints.

3. Why Reducing Food Loss Matters

1. **Food Security:** Recovering food already produced increases effective food availability without proportionately increasing production.
2. **Farmer Incomes:** Better storage, processing and market access reduce value destruction and improve price realisation.
3. **Resource Conservation:** Food saved also saves the **water, land, energy, fertilisers and labour** embedded in its production.
4. **Climate Action:** Preventing unnecessary production and disposal reduces associated greenhouse-gas emissions.
5. **Circular Economy:** Unavoidable organic residues can be converted into **compost, biogas and bio-CNG**, creating additional economic value.

4. What Needs to Be Done?

1. **Target High-Loss Commodities:** Use the loss data to prioritise **fruits, vegetables, fisheries and other perishables**, where the percentage losses are relatively high.

2. **Strengthen Farm-to-Market Infrastructure:** Expand cold chains, scientific warehouses, pack houses, drying, cooling, transportation and processing facilities.
3. **Take Facilities Closer to Producers:** Promote decentralised storage and primary processing through **Farmer Producer Organisations (FPOs)** and producer groups.
4. **Scale Existing Schemes:** **Pradhan Mantri Kisan SAMPADA Yojana (PMKSY)** is already aimed at integrated food-processing and preservation infrastructure; as of June 2026, **1,256 PMKSY projects were operational and benefiting about 37.76 lakh farmers.**
5. **Strengthen Fisheries Infrastructure:** Expand ice plants, cold storage, refrigerated transport and insulated vehicles under schemes such as **Pradhan Mantri Matsya Sampada Yojana (PMMSY).**
6. **Build Waste-to-Wealth Systems:** Improve segregation, redistribution of edible surplus and conversion of unavoidable organic waste into **compost, biogas and bio-CNG.**

KYAUKTAW

33 killed in military air strike in Myanmar's Rakhine: rebel group



AFP

▲ A military air strike on a market in the town of Kyauktaw in Myanmar's Rakhine State killed 33 people on Monday and wounded 36 more, according to Arakan Army, the rebel faction which controls the area. Nearly half-a-million people are living displaced in the State due to the civil war unleashed by a 2021 military coup. AFP



3. Myanmar: Airstrike in Rakhine State

Source: Reuters / The Hindu

GS-2: International Relations | India–Myanmar Relations | Regional Security | Humanitarian Crisis

Context

The continuing conflict in Myanmar has again come into focus after an airstrike in **Kyauktaw township of Rakhine State**, highlighting the wider security and humanitarian consequences of instability in Myanmar.

1. Myanmar: Geographical Context

1. **Location:** Myanmar connects **South Asia with Southeast Asia**, with access to the **Bay of Bengal and Andaman Sea**.
2. **Neighbours:** India, Bangladesh, China, Laos and Thailand.
3. **India–Myanmar border:** About **1,643 km**, adjoining **Arunachal Pradesh, Nagaland, Manipur and Mizoram**.
4. **Strategic position:** Myanmar is India's important **land bridge to Southeast Asia** and is central to the **Act East Policy**.

2. Why Kyauktaw, Rakhine Is in News

1. **Kyauktaw** is in northern **Rakhine State**, along the **Kaladan River**, and is controlled by the **Arakan Army (AA)**.
2. A Myanmar military airstrike near a market reportedly killed **49 people and injured 58**; the figures were reported by the AA and rescue officials and could not be independently verified.
3. The AA is an **ethnic armed organisation seeking greater autonomy for Rakhine** and has expanded its territorial control during Myanmar's post-2021 conflict.

3. Why Peace and Stability in Myanmar Matter for India

1. **Rakhine–Bay of Bengal:** Rakhine's location on the **Bay of Bengal** makes instability relevant to India's maritime and regional security.
2. **Rakhine–Sittwe Port:** **Sittwe Port**, developed with Indian assistance, is an important component of the **Kaladan Multimodal Transit Transport Project**.
3. **Rakhine–Northeast Connectivity:** The Kaladan route connects **Kolkata–Sittwe–Kaladan River–Paletwa–Mizoram**, providing an alternative connectivity route to India's Northeast.
4. **Rakhine–Rohingya Crisis:** Conflict in Rakhine has produced large-scale displacement towards **Bangladesh**, creating humanitarian and regional-security concerns for India.
5. **Myanmar–Northeast Security:** Instability across Myanmar can facilitate **insurgency, arms trafficking, narcotics trafficking and illegal cross-border movement**, affecting India's northeastern States.
6. **Myanmar–Act East:** A stable Myanmar is essential for India's **connectivity with Southeast Asia, economic engagement with ASEAN and effective implementation of the Act East Policy**.

• CLIMATE

UP rain: When two weather systems interact

Abhinav Chakraborty

New Delhi, September 28

AN INTENSE three-day wet spell in Uttar Pradesh between Friday and Sunday left several districts grappling with a flood-like situation. The state received 66.5 mm of rainfall against the normal 7.6 mm for the period, according to officials.

As many as 56 of the state's 75 districts recorded excessive rainfall. At least 62 people died, 46 were injured, and over a thousand houses were damaged. According to the India Meteorological Department (IMD), the "likely interaction" of two different weather systems — a deep depression and a Western Disturbance (WD) — was producing spells of intense rainfall over particular areas, even as the southwest monsoon continues to withdraw across north and northwestern India.

Deep depression

The IMD noted that a deep depression, which had formed over the Bay of Bengal and crossed the North Andhra Pradesh-South Odisha coast before weakening, lay centred over parts of north-eastern Madhya Pradesh and south-eastern Uttar Pradesh.

A depression is an organised low-pressure weather system. A low-pressure system forms in an area where atmospheric pressure is lower than the surrounding areas. This

4. UP Rain: When Two Weather Systems Interact

Source: The Hindu

GS-1: Indian Geography | Climatology

GS-3: Disaster Management | Extreme Weather

Context

Uttar Pradesh witnessed intense rainfall and flood-like conditions as a **Bay of Bengal-origin Deep Depression interacted with a Western Disturbance** over northern India during the withdrawal phase of the Southwest Monsoon.

1. The Two Weather Systems

Deep Depression

1. **Formation:** Warm waters of the **Bay of Bengal** provide heat and moisture, causing moist air to rise and pressure to fall, forming a low-pressure system.
2. **Intensification:** Continued moisture supply and favourable atmospheric conditions can strengthen it into a **depression and then a deep depression**.
3. **Movement:** The system crossed the **North Andhra Pradesh–South Odisha coast** and moved inland towards Madhya Pradesh and Uttar Pradesh.
4. **Role:** It carried substantial **moisture from the Bay of Bengal** into central and northern India.

Western Disturbance

1. **Nature:** An eastward-moving **extra-tropical weather system** originating around the Mediterranean, Caspian and adjoining regions.
2. **Movement:** It reaches India mainly through the **Subtropical Westerly Jet Stream**.
3. **Normal impact:** It brings rainfall and thunderstorms to **northwestern India** and snowfall to parts of the western Himalayas.
4. **Role in this event:** A WD trough over northwestern India interacted with the moisture-rich depression.

2. How Their Interaction Caused Heavy Rainfall

1. **Moisture supply:** The Deep Depression brought large quantities of **Bay of Bengal moisture** inland.
2. **Moisture convergence:** The Western Disturbance helped create conditions in which this moisture accumulated over northern India.

3. **Strong upward movement:** The interaction forced moist air to rise, causing **cooling, condensation and intense cloud formation**.
4. **Prolonged rainfall:** The movement and interaction of the systems allowed some areas to receive heavy rainfall over an extended period.
5. **Monsoon transition:** The event occurred while the **Southwest Monsoon was withdrawing**, showing that significant rainfall can continue even during the withdrawal phase when other weather systems become active.

3. Impact in Uttar Pradesh

1. **Exceptional rainfall:** UP received **66.5 mm rainfall against the normal 7.6 mm** for the period.
2. **Wide coverage:** **56 of 75 districts** recorded excessive rainfall.
3. **Human impact:** At least **62 people died and 46 were injured**.
4. **Damage:** More than **1,000 houses were damaged**, along with widespread waterlogging and flood-like conditions.
5. **Forecasting challenge:** Interaction between multiple weather systems can make the **location and intensity of extreme rainfall more difficult to predict**.

4. What Can We Learn Further?

1. **Improve forecasting:** Strengthen observation of **Bay of Bengal systems, Western Disturbances and upper-air circulation**.
2. **Focus on compound events:** Disaster planning should account for **multiple interacting weather systems**, not isolated events.
3. **District-level preparedness:** Early warnings should be quickly converted into **local evacuation, drainage and flood-management measures**.
4. **Better urban resilience:** Improve **drainage, floodplain management and protection of critical infrastructure** in vulnerable districts.
5. **Climate-resilient planning:** Increasing variability in extreme rainfall requires stronger **weather forecasting, resilient infrastructure and disaster preparedness**.

Atmanirbharta in defence: It's not as simple as it seems



AJAI SHUKLA

PM NARENDRA Modi's public relations machine has, over the years, fashioned a string of slogans that encourage the development of an autarkic defence economy. These include "Make in India" coined in 2014; "Vocal for Local" in 2020 and the most intensely marketed *atmanirbhar* Bharat (self-reliant India) in the same year. On September 24, Defence Minister Rajnath Singh said that the government's vision was to "design in India, develop in India, manufacture in India".

Given the Indian military's unfortunate addiction to foreign weaponry — it was the world's fifth-largest defence spender last year, and the second-largest importer of weaponry after war-torn Ukraine — any exhortation to indigenise rather than import is practically immune to contradiction. To argue against *atmanirbhar* Bharat is to invite allegations of being in the pockets of the big global arms corporations. However, *atmanirbharta* is on the wrong side of this well-known cost hierarchy in defence acquisitions: That the most cost-effective and timely method for acquiring a high-tech defence platform is to lease it for the duration that it is needed. Somewhat costlier is to buy the platform over the counter. Costlier than that is buying manufacturing technology and setting up a factory to build the equipment in-country. Paradoxically, *atmanirbharta*, which involves design-

5. Atmanirbharta in Defence: From Production to Strategic Autonomy

Source: The Hindu

GS-3: Defence & Security | Defence Indigenisation | Defence Technology | Strategic Autonomy

Context

India's defence production has expanded rapidly, but **domestic manufacturing does not automatically mean technological self-reliance**. The key issue is whether India can independently **design, develop, produce, maintain and upgrade critical military systems**.

1. Why Defence Atmanirbharta Matters

1. **Strategic autonomy:** Dependence on foreign suppliers can become a vulnerability during **war, sanctions or geopolitical disruptions**.
2. **Operational readiness:** Indigenous access to **ammunition, spares and maintenance** reduces the risk of supply interruptions during prolonged conflict.
3. **Technology capability:** Defence R&D strengthens capabilities in **aero-engines, electronics, sensors, Artificial Intelligence, cyber technology and advanced materials**.
4. **Economic ecosystem:** Defence indigenisation creates markets for **Indian MSMEs, startups, skilled manpower and research institutions**.
5. **Import vulnerability remains:** SIPRI's latest data places India as the **world's second-largest recipient of major arms in 2021–25**, accounting for **8.2% of global imports**. India's imports declined 4% from 2016–20, but major foreign procurements continue.
6. **Progress is substantial:** Domestic defence production reached **₹1.78 lakh crore in 2025–26**, up from ₹46,429 crore in 2014–15, while exports reached a record **₹38,424 crore** and Indian defence products are now exported to **80+ countries**.

2. The Core Problem: Manufacturing Is Not the Same as Self-Reliance

1. **Platform-level dependence:** A system may be manufactured in India while critical **engines, sensors, electronics or materials** remain imported.
2. **Tejas illustrates the gap:** The **LCA Tejas Mk1A** has an indigenous content of **over 64%** and incorporates systems such as the indigenous **Uttam AESA radar**, but its programme still uses the **GE F404 engine** supplied by the United States.
3. **Critical technology bottlenecks:** **Aero-engines, advanced propulsion, electronic warfare, specialised semiconductors and advanced materials** require decades of R&D and testing.

4. **Lifecycle dependence:** Dependence can continue even after production through foreign requirements for **spares, maintenance, software, upgrades and replacement components**.
5. **Global supply-chain reality:** Even advanced defence industries source some specialised technologies internationally; therefore, complete isolation is neither necessary nor necessarily economical.

3. Where India Needs to Move: From Assembly to Technology Ownership

1. **Indigenous design:** The objective should progressively shift from assembling or manufacturing platforms to **owning their underlying designs and technologies**.
2. **Critical subsystems first:** Priority should be given to technologies whose disruption could directly affect operational capability, such as **propulsion, sensors, electronics and ammunition**.
3. **Positive Indigenisation Lists:** The sixth list notified in 2026 covers **405 strategically important items**, including radar, sonar, fire-control systems, missile components, aircraft systems and the **AL-31FP engine**.
4. **Ammunition example:** Of the Army's 175 in-service ammunition variants, **159 (90.85%) had been indigenised** according to the Ministry of Defence, showing that targeted indigenisation is possible in specific categories.
5. **R&D ecosystem:** The DRDO allocation for 2026–27 is **₹29,100.25 crore**, with about **25% of the defence R&D budget opened to industry, startups and academia**; 15 DRDO–Industry–Academia Centres of Excellence have also been established.

4. What Needs to Be Done?

1. **Map strategic dependencies:** Identify which imported technologies are genuinely **critical to national security** and prioritise them rather than pursuing indiscriminate indigenisation.
2. **Deepen R&D:** Convert India's growing production base into **design and intellectual-property capability** through DRDO, universities, startups and private industry.
3. **Build complete supply chains:** Develop domestic capabilities from **materials and components to testing, maintenance and upgrades**.
4. **Use foreign partnerships strategically:** Where domestic development is not yet viable, pursue **co-development, technology transfer and joint production** rather than simple buyer–seller relationships.
5. **Integrate MSMEs and startups:** Recent policy initiatives are lowering technical and financial entry barriers and providing startups access to **DRDO testing facilities and funding**; this is important because critical subsystems are often developed by smaller specialised firms.
6. **Balance autonomy with efficiency:** The goal should not be to manufacture every component domestically, but to ensure that **critical military capabilities cannot be easily disrupted by external dependence**.

Keralam researchers discover new *Begonia* species on cliffs

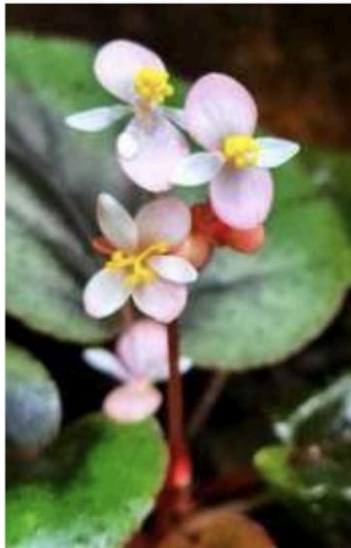
The Hindu Bureau

THIRUVANANTHAPURAM

Researchers have identified a new species of the genus *Begonia* from the Western Ghats region in Kollam district of Kerala.

A research team of the Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI) in Thiruvananthapuram spotted the plant during an exploration for collecting wild ornamental plants from the evergreen forests of Rosemala in Kollam.

The discovery has been reported at a time when the ghats region is back in the news in connection with the State government's recommendations regarding Ecologically Sensitive Areas (ESA).



Begonia rajvikramanii

They named the species *Begonia rajvikramanii* after R. Raj Vikraman, former Head of the Garden Management Division, JNTBGRI, in recognition of his contributions to the development of the JNTBGRI

garden and the management of ex-situ plant conservation programmes at the institute.

A paper on the discovery and the plant's identification as a new species by E.S. Santhosh Kumar, S.M. Shareef, P.P. Anusha and Rejitha Joseph of JNTBGRI has been published in the latest issue of *Phytotaxa*.

The plant was found growing on wet rocky cliffs. "This new species is currently known only from its type locality at Rosemala. It grows in wet habitats, particularly on rocky cliffs and road-cut walls, at elevations of approximately 200 metres-350 metres," the paper said.

Its flowering and fruiting occurs between August and April.

6. New *Begonia*

Species Discovered in the Western Ghats

Source: The Hindu

GS-3: Environment | Biodiversity | Western Ghats | Species Conservation

Context

Researchers from the **Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI)** have identified a new species, ***Begonia rajvikramanii***, from **Rosemala in Kollam district, Kerala**, highlighting the unexplored biodiversity of the Western Ghats. The species has been formally described in *Phytotaxa*.

1. *Begonia rajvikramanii*: Key Features

1. **Taxonomy:** A new species of the genus **Begonia**, belonging to the family **Begoniaceae**; the genus has around **2,200 accepted species** globally.
2. **Habitat:** Found in **wet habitats**, particularly on rocky cliffs and road-cut walls.
3. **Distribution:** Currently known only from its **type locality at Rosemala**, at around **200–350 m elevation**.
4. **Population:** About **200 mature individuals** have been observed over an area of **less than 5 km²**.
5. **Flowering:** Flowering and fruiting occur mainly from **August to April**.
6. **Name:** Named after **R. Raj Vikraman**, former Head of the Garden Management Division at JNTBGRI, for his contribution to the institute and ex-situ plant conservation.

2. Why Is the Discovery Important?

1. **Western Ghats biodiversity:** The Western Ghats is a globally recognised **biodiversity hotspot**, with high levels of species richness and endemism.
2. **Hidden biodiversity:** Discovery of a species restricted to a small habitat demonstrates that **taxonomic exploration is still revealing previously undocumented biodiversity**.
3. **Narrow distribution:** Its known occurrence in a very small area makes **habitat protection particularly important**, although its complete distribution is yet to be established.