

Daily Current Affairs





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The Hindu



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Express**



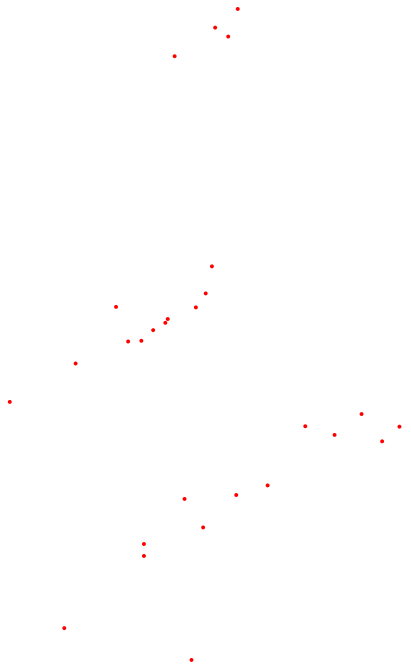
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10 MCQ QUIZ

- "The universe is under no obligation to make sense to you." — *Neil deGrasse Tyson*

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INSIDE



Labour policy aims to combine social schemes

NEW DELHI
Universal and portable social security is a key component of the draft National Labour and Employment Policy, which proposes to create a universal account by integrating social sector schemes. The draft policy was released for public consultation. **» PAGE 8**

Doctor attacked by deceased girl's father in Kerala

KOCHI
A doctor working in a hospital in Kerala suffered serious head injuries on Wednesday after he was attacked with a machete by the father of an eight-year-old girl who died of meningitis meningorhegmatitis in August. **» PAGE 5**

No formal word on Indian held by Ukrainian forces

NEW DELHI
Indian officials said on Tuesday they were seeking more details about an Indian national who claimed that he had been detained by Ukrainian authorities while fighting for the Russian Army. **» PAGE 5**

NDA and grand alliance evenly poised in Bihar

PATNA
Of the 121 constituencies going to the polls in the first phase of the Bihar Assembly election, the ruling National Democratic Alliance and the Opposition Mahagathabandhan (grand alliance) are evenly poised, it was the case in the 2019 election. **» PAGE 5**

Trio wins Chemistry Nobel for bridging metals and organics

Jacob Koshy
NEW DELHI

An Australian, a Japanese and a Jordanian-American scientists were announced winners of the Nobel Prize in Chemistry for discovering and creating a class of materials, called metal-organic frameworks (MOFs).

Metallic and organic substances are as far apart in the chemical world as Australia and the U.S. geographically and it was inconceivable that stable, useful products could be made out of materials formed by integrating them. But beginning Richard Robson's initial conception of them almost 30 years ago, sparked from a science project for his Melbourne University students; to Susumu Kitagawa's dogged determination, in Kyoto University, at creating porous molecules

Trade pact a launchpad for growth: U.K. PM

The Trade Agreement presents unparalleled opportunities, says Starmer as he begins visit

The Hindu Bureau
NEW DELHI

The opportunities waiting to be seized under the India-U.K. Free Trade Agreement are "unparalleled", British Prime Minister Keir Starmer said in Mumbai on Wednesday as he kick-started his first visit to India after assuming charge.

"It's the biggest deal we've struck since we left the European Union," Mr. Starmer said. "I think it's also the biggest deal that India has ever struck, so it's hugely important."

Mr. Starmer, accompanied by a delegation of nearly 100 entrepreneurs, university Vice-Chancellors, arrived in Mumbai for a two-day visit to take advantage of the opportunity by the India-U.K. Comprehensive Economic and Trade Agreement signed in July.

"It's not just a piece of paper, it's a blueprint for growth. With India set to be the third biggest economy in the world by 2028, and trade with them about to become quicker and cheaper, the opportunities waiting to be seized are unparalleled," he said.

He will meet Prime Minister Narendra Modi on Thursday. They will address the 46th edition of the Global Fintech Fest in Mumbai.

"Welcome Mr. Starmer on your historic first visit to India with the largest ever trade delegation from the U.K.," Mr. Modi said on X. "Looking forward to our meeting tomorrow for advancing our shared vision of a stronger, mutually prosperous future."

"During the visit, on October 9 in Mumbai, the two Prime Ministers will take stock of progress in diverse aspects of the India-U.K. Comprehensive Economic and Trade Agreement," Mr. Starmer said.

Both leaders would engage with business and industry leaders regarding the opportunities presented by the trade agreement. "They will also exchange



Boosting ties: U.K. Prime Minister Keir Starmer interacts with a delegation accompanying him on his India visit, here.

technology and innovation on issues of regional and global importance," it added. The India-U.K. CETA aims at boosting bilateral trade by £25.5 billion annually.

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Investments and visas
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Mr. Starmer, however, reportedly indicated that the U.K. would not be revisiting its visa requirements for Indians. According to the BBC, Mr. Starmer reportedly said that no business leaders he had met so far raised the question of visas. It added that during the light to India, Mr. Starmer said that visas "played no part" in the CETA and that the situation had not changed.

Mr. Starmer also visited

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The British Prime Minister is reportedly keen to strengthen cultural ties between India and the U.K. and promote collaboration between the film industries of the two countries.

The U.K. government issued a release on Wednesday saying that these new bilateral partnerships would be made in the U.K. from next year, with YRF having confirmed plans to bring their major productions to locations across the U.K. from early 2021.

Commerce and Industries Minister Pritish Gandhi met Peter Kyle, the U.K.'s Secretary of State for Business and Trade, in Mumbai with a view to moving forward the operationalisation of the India U.K. CETA, the Commerce and Industry Ministry said in a statement. Mr. Kyle is part of the delegation accompanying Mr. Starmer.

Snowed in



Out in the cold: Snowfall disrupted traffic on the Manali-Leh highway on Wednesday. Cold wave conditions persisted in Himachal Pradesh's high-altitude areas, according to the local weather office. **»**

Seven killed in explosion at firecracker unit in A.P.

T. Annapala Naidu
ANALAPURAM

Seven persons, including three women workers and the proprietor, were killed in an explosion at a firecracker manufacturing unit in A.P. on Wednesday.

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11 soldiers among 30 killed amid clashes in Pak. border province

Priest Tunde
PESHAWAR

At least 10 Pakistani military personnel, including a Lieutenant-Colonel and a Major, were killed in clashes with the Taliban militants during an operation in Khyber Pakhtunkhwa province bordering Afghanistan, the Army said on Wednesday.

In a statement, the Inter-Services Public Relations (ISPR), the media wing of the military, said 10 militants of the Fatah al-Khawarij were also killed during the operation in Orakzai district on Tuesday night.

The Pakistan government last year notified the banned Tehreek-e-Taliban Pakistan (TTP) as Fatah al-Khawarij, a reference to a group to earlier Islamic history which was involved in violence.

During the "intense" exchange of fire between security forces and the militants, 10 militants "were sent to hell", the statement said. It said that 30-year-old Lt. Col. Junaid Tariq, who was leading his troops from the front, and his second-in-command, 33-year-old Major Tayyab Bhat, were killed along with nine of their men.

Prime Minister Shehbaz Sharif expressed grief over the killing of the soldiers, saying the sacrifices of the fearless sons of the security forces will never go in vain.

He said Pakistan will crush the nefarious intentions of terrorism. "We will not allow anyone to harm Pakistan's integrity to succeed," he added.

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For the development of metal-organic frameworks

JOSEPH M. YAGHI, University of California, U.S.
CHRISTIAN NÖRDBORN, University of Melbourne, Australia
SUSUMU KITAGAWA, Kyoto University, Japan

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Initially, it was challenging to get scientists to appreciate MOF as they didn't seem to be much better than a class of materials called zeolites, but things changed when they succeeded in developing soft MOFs – a step up from zeolites, which are hard. One of those who was able to present a feasible material was Kitagawa himself. When his material was filled with water or methane, it changed shape, and when it was emptied, it returned to its original form. It behaved somewhat like a lung that can breathe gas in and out, changeable but stable.

Pakistan has seen a surge in militant attacks, particularly in Khyber Pakhtunkhwa and Balochistan provinces, after the banned TTP called off its ceasefire with the security forces in November 2022 and vowed to target security forces, police, and law enforcement agencies.

According to the latest statistics issued by the Centre for Research and Security Studies (CRSS), Khyber Pakhtunkhwa was the most hit region in the country in the third quarter of 2023.

It suffered nearly 76% (638) of the total violence-related fatalities, and over 67% (23) of the incidents of violence.

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The Trade Agreement presents unparalleled opportunities, says Starmer as he begins visit

Starmer to meet PM Modi today to take stock of India-U.K. Comprehensive Strategic Partnership

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Mr. Starmer, accompanied by a delegation of nearly 100 entrepreneurs, cultural representatives, and university Vice-Chancellors, arrived in Mumbai for a two-day visit to take advantage of the opportunities brought about by the India-U.K. Comprehensive Economic and Trade Agreement signed in July.

“It’s not just a piece of paper, it’s a launchpad for growth. With India set to

be the third biggest economy in the world by 2028, and trade with them about to become quicker and cheaper, the opportunities waiting to be seized are unparalleled,” he said.

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“Welcome Mr. Starmer on your historic first visit to India with the largest ever trade delegation from the U.K.,” Mr. Modi said on X. “Looking forward to our meeting tomorrow for advancing our shared vision of a stronger, mutually prosperous future.”

“During the visit, on October 9 in Mumbai, the two Prime Ministers will take stock of progress in diverse aspects of the India-U.K. Comprehensive Strategic Partnership in line with ‘Vision 2035’, a focused and time bound 10-year road map of programmes and initiatives in key pillars of trade and investment,



Boosting ties: U.K. Prime Minister Keir Starmer interacts with a delegation accompanying him on his India visit, AFP

technology and innovation, defence and security, climate and energy, health, education and people to people relations,” the External Affairs Ministry said.

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Commerce and Industries Minister Piyush Goyal met Peter Kyle, the U.K.’s Secretary of State for Business and Trade, in Mumbai with a view to moving forward with the operationalisation of the India-U.K. CE-TA, the Commerce and Industry Ministry said in a statement. Mr. Kyle is part of the delegation accompanying Mr. Starmer.

- **Context:** British Prime Minister **Keir Starmer** began his first visit to India after taking office.
 - **Agenda:** To boost the **India–U.K. Comprehensive Strategic Partnership** and expedite the **India–U.K. Free Trade Agreement (FTA)**.
 - **Quote:** Starmer termed the agreement “the biggest deal since we left the European Union.”
 - **Focus:** Enhancing trade, investment, and cultural ties between the two nations.
-

2. India–U.K. Free Trade Agreement (FTA)

(a) Key Features

- Aims to provide **duty-free access on 99.1% of tariff lines**, covering **100% of trade value** immediately upon enforcement.
- Expected to boost **bilateral trade by £25.5 billion annually**.
- Reduces tariffs on goods such as:
 - **Textiles, whisky, automobiles**, and other manufactured goods.
- Encourages collaboration in:
 - **Technology, climate & energy, education, defence, health**, and **innovation**.

(b) Institutional Mechanism

- The agreement is part of the **Comprehensive Economic and Trade Agreement (CETA)** framework.
- Aligned with the long-term “**Vision 2035**” roadmap for India–U.K. relations.

3. Strategic Outcomes of the Visit

- **Bilateral Talks:**
 - PM Starmer to meet **PM Narendra Modi** to review progress under the **Comprehensive Strategic Partnership**.
 - Will address the **Global Fintech Fest 2025** in Mumbai.
 - **Sectoral Cooperation:**
 - U.K. industries (e.g., **Rolls-Royce**) to expand R&D and in-country production in India.
 - Collaboration across **air, land, and sea technologies**.
 - **Cultural Exchange:**
 - Strengthening **film industry collaboration** between **Yash Raj Films (YRF)** and U.K. studios.
 - Three Bollywood movies to be filmed in the U.K. starting 2026.
-

4. Investments and Visa Reforms

- Starmer clarified **visa policies remain unchanged**, emphasizing trade over migration debates.
- Increased opportunities for **business delegations, start-ups, and university collaborations**.
- Promotes **ease of doing business** through reduced trade barriers.

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5. Significance

(a) For India

- Enhances **market access** for Indian textiles, pharma, and IT services.
- Positions India as a **global manufacturing hub** under *Make in India* and *Atmanirbhar Bharat*.
- Strengthens ties with one of India's top 5 trading partners.

(b) For the U.K.

- Access to India's **1.4 billion market** post-Brexit.
- Opportunity to diversify beyond the EU.
- Supports the U.K.'s ambition to be a **Global Britain** in the Indo-Pacific.

A. Historical Context

- **India–U.K. trade relations** date back to colonial times; trade was once dominated by the **East India Company (1600–1858)**.
 - Post-Independence, ties evolved from **Commonwealth cooperation** to **strategic partnership (2004)**.
 - The **India–U.K. 2030 Roadmap**, signed in 2021, includes:
 - Trade & prosperity, defence cooperation, climate action, health, and people-to-people ties.
-

B. Polity & International Relations (IR) Angle

- Both are members of:
 - **Commonwealth of Nations, G20, UN, and Financial Action Task Force (FATF)** partner forums.
- The FTA aligns with **India's Look West & Act East Policy**, enhancing ties with Western economies post-Brexit.
- The U.K. is also a major investor in India — over **₹3.2 lakh crore cumulative FDI** (as per DPIIT data).

C. Economic Dimension

- **Bilateral Trade (FY 2023–24):** Over **\$20 billion**.
 - India's key exports: textiles, gems & jewellery, pharma, machinery.
 - U.K.'s key exports: Scotch whisky, automobiles, precision instruments.
 - The agreement complements **India's other FTAs** with:
 - **UAE (2022), Australia (2023), EFTA (2024)**, and ongoing talks with **EU, Canada, and GCC**.
-

D. Geopolitical Context

- The U.K.'s pivot to the **Indo-Pacific** aims to balance China's influence.
 - India–U.K. cooperation supports the **free and open Indo-Pacific (FOIP)** concept.
 - Defence partnership includes co-development in **jet engines (Rolls-Royce)** and **aircraft carriers**.
-

Trio wins Chemistry Nobel for bridging metals and organics

Jacob Koshy

NEW DELHI

An Australian, a Japanese and a Jordanian-American scientists were announced winners of the Nobel Prize in Chemistry for discovering and creating a class of materials, called metal-organic frameworks (MOF).

Metallic and organic substances are as far apart in the chemical world as Australia and the U.S. geographically and it was inconceivable that stable, useful products could be made out of materials formed by integrating them. But beginning Richard Robson's initial conception of them in the mid 1970s, sparked from a science project for his Melbourne University students; to Susumu Kitagawa's dogged determination, in Kyoto University, at creating porous molecules

– despite knowing that they were “useless” – but tinkering with them until he created the right kind of structures that were useful enough to work as a filter whilst remaining flexible and pliant; to finally Omar Yaghi at the University of California, Berkley, making a variety of metal-organic frameworks, as he named them, that were capable of drawing water vapour out of desert air at night and releasing them as water in the day. The three will equally share the prize of 11 million Swedish kroner, about ₹1 crore.

Following the laureates' groundbreaking discoveries, chemists have since built tens of thousands of different MOFs. Some of these may contribute to solving some of humankind's greatest challenges, with applications that include separating PFAS (a

For the development of metal-organic frameworks



family of chemicals that are believed to be toxic) from water, breaking down traces of pharmaceuticals in the environment, capturing carbon dioxide or harvesting water from desert air, a press statement noted.

Molecular kit

Researchers have developed a molecular kit with

a wide range of different pieces that can be used to create new MOFs. These have different shapes and characters, providing incredible potential for the rational – or AI-based – design of MOFs for different purposes.

First of the block and inspired by a project to make wooden block representations of chemical bonds,

Mr. Robson began by testing the inherent properties of atoms in a new way. He combined positively charged copper ions with a four-armed molecule; this had a chemical group that was attracted to copper ions at the end of each arm. When they were combined, they bonded to form a well-ordered, spacious crystal. It was like a diamond filled with innumerable cavities.

Mr. Robson immediately recognised the potential of his molecular construction, but it was unstable and collapsed easily. However, Mr. Kitagawa and Mr. Yaghi provided this building method with a firm foundation; between 1992 and 2003 they made, separately, a series of revolutionary discoveries.

Mr. Kitagawa showed that gases can flow in and out of the constructions

and predicted that MOFs could be made flexible.

Mr. Yaghi created a very stable MOF and showed that it can be modified using rational design, giving it new and desirable properties.

Initially, it was challenging for the scientific community to appreciate MOF as they didn't seem to be much better than a class of materials called zeolites. But things changed when they succeeded in developing soft MOFs – a step up over zeolites that were hard. One of those who was able to present a flexible material was Kitagawa himself. When his material was filled with water or methane, it changed shape, and when it was emptied, it returned to its original form. It behaved somewhat like a lung that can breathe gas in and out, changeable but stable.

- **Nobel Prize in Chemistry (2025)** awarded jointly to:
 - **Omar M. Yaghi** – University of California, U.S. 🇺🇸
 - **Richard Robson** – University of Melbourne, Australia 🇦🇺
 - **Susumu Kitagawa** – Kyoto University, Japan 🇯🇵
 - **Discovery:** Development of **Metal–Organic Frameworks (MOFs)** — a new class of crystalline materials combining metal ions and organic linkers.
 - **Prize Amount:** 11 million Swedish kronor (\approx ₹1 crore).
-

2. About Metal–Organic Frameworks (MOFs)

(a) Definition

- MOFs are **porous crystalline structures** made by **coordinating metal ions with organic molecules**.
- They create a **3D network** with **huge internal surface area** — a few grams can have the area of an entire football field!

(b) Properties

- **Extremely lightweight and porous.**
- **High surface area** → allows absorption, filtration, and gas storage.
- **Flexible yet stable** → can "breathe" like a lung (expand and contract with gases).
- Can be **designed atom-by-atom** using "reticular chemistry."

(c) Applications

- **Climate change mitigation:** Capturing CO₂ and other greenhouse gases.
- **Water harvesting:** Drawing water vapour from desert air and releasing it as liquid water.
- **Energy:** Hydrogen and methane storage for clean fuels.
- **Environment:** Filtering PFAS ("forever chemicals") and pharmaceutical residues.
- **Industry:** Used in sensors, catalysts, and semiconductor manufacturing.

3. Scientific Significance

(a) Bridge Between Metal and Organic Chemistry

- Traditionally, metals (inorganic) and carbon compounds (organic) were studied separately.
- MOFs combine **metal ions (inorganic)** with **organic linkers** → bridging two major chemical worlds.

(b) New Grammar of Matter

- MOFs redefine how matter can be designed — from **finding new materials** to **constructing them atomically** for desired properties.
- Marks the rise of **"Reticular Chemistry"**, pioneered by Omar Yaghi.

4. Historical Development

Year	Scientist	Discovery / Contribution
1970s	Richard Robson	First envisioned linking metal ions with organic molecules.
1990s	Susumu Kitagawa	Created flexible MOFs that could "breathe."
1995–2003	Omar Yaghi	Systematized MOF design; coined "Reticular Chemistry"; developed MOF-5.

A. Science & Technology Angle

- MOFs are part of **Nanochemistry** and **Advanced Material Science**.
 - Related fields:
 - **Zeolites** (precursors to MOFs).
 - **Graphene & Nanotubes** (carbon-based frameworks).
 - India's relevance: CSIR and IITs are already working on **CO₂ capture and desalination using MOFs**.
-

B. Environmental Context

- **Global relevance:** Helps meet **Paris Climate Agreement** targets through carbon capture.
 - **SDG Linkages:**
 - SDG 6 – Clean Water and Sanitation
 - SDG 7 – Affordable and Clean Energy
 - SDG 13 – Climate Action
 - Could revolutionize **desert-region water access** (e.g., Rajasthan, Africa, Middle East).
-

IN BRIEF



At least six injured in scooter explosions at Kanpur market

Two scooters parked in the congested Mohi Bazar near the Marwa Bazaar in Kanpur exploded seconds apart on Wednesday evening, injuring six people and damaging nearby shops, the police said. The blasts occurred around 7.30 p.m. in the crowded Moolganga area. The sound of the explosions was heard up to 500 metres from the spot. The injured were rushed to hospital. Two of them were discharged after first aid and two others are undergoing treatment for burns, said Police Commissioner of Kanpur Raghubir Lal. He added that the incident was being investigated from all possible angles. **IN**

4 workers killed, 6 injured as lift crashes in Chhattisgarh

At least four workers were killed and six injured after a lift collapsed from a height at a power plant in Chhattisgarh's Sakti district, the police said on Wednesday. Among the injured, four are critical and the remaining two are stable. Superintendent of Police Ananta Sharma said, Ms. Sharma told *The Hindu* that the accident had taken place at RKM Powergen Private Ltd's plant in the Babbar area of Uchgaon village on Tuesday night. "They were 40 ft above the ground when the lift collapsed. We reached the spot and took them to Jindal Fortis Hospital in neighbouring Raigarh. The lift had been registered against the owner of the company." **IN**

ED curbs fake summons scam with new QR code verification

The Enforcement Directorate (ED) has implemented a mechanism of generating summons through a system that includes a QR code and a unique passcode to ensure that unscrupulous elements are unable to extort money from people using fake summonses. Officials have been instructed to issue all summonses through the system, except in certain exceptional circumstances. The summons generated from the system will be duly signed and stamped by the issuing authority and will include the officer's official email ID and the phone number. The verification of the summons can be done 24 hours after the date of issue. **IN**

Delhi HC issues notice to Red Chillies in defamation case

The Delhi High Court on Wednesday issued notice to Red Chillies Entertainment, Netflix and others on a defamation suit filed by Indian Revenue Service (IRS) officer Sumant Wankhede against the makers of the series *Red Chillies*. Justice Purushottam Kumar Kaurav issued summons to the defendants which include the owners of Red Chillies, X, Google, and Meta Platforms, and asked them to file their replies within seven days. The court did not pass any interim order on Mr. Wankhede's application seeking to take down the several alleged defamatory content from several websites and social media platforms. **IN**

Draft labour policy unites social security schemes

It aims at creating universal, portable social security accounts for all workers by 2030, it also seeks to raise women's labour participation to 35%, offer single-window digital compliance for MSMEs

The Hindu Bureau
NEW DELHI



The policy envisions a labour ecosystem that improves protection and productivity for every worker. **IN**

Universal and portable social security is a major component of the draft National Labour and Employment Policy, which proposes to create a universal account by integrating the Employees Provident Fund Organisation, Employees State Insurance Corporation, Pradhan Mantri Jeev Arogya Yojana, eSHRAM, and State welfare Boards. The draft policy, known as the Shram Abhikhi NRI, 2025, was released on Wednesday for public consultation. The proposals include the implementation of the Occupational Safety and Health Code, welfare risk-based inspections, gender-sensitive standards, and the convergence of various skills schemes. The draft policy presents a renewed vision for a fair, inclusive, and future-ready world of work aligned with the national aspiration of a developed India by 2047, Union Labour Minister Manoj Sinha said.

"Rooted in India's civilisational ethos of *dharma*, *dharma*, the dignity and moral value of work, the

policy envisions a labour ecosystem that ensures protection, productivity, and participation for every worker. It seeks to create a balanced framework that upholds workers' welfare while enabling enterprises to grow and generate sustainable livelihoods," Mr. Sinha said.

Expected outcomes of the policy include universal worker registration and social security portability, near-zero workplace fatalities, increased female la-

bour-force participation, a sharp reduction in industrial jobs through digital compliance, At-driven labour-governance capacity in all states, the creation of millions of green and decent jobs, and a fully compliant 'One Nation, One Labour' ecosystem. The last date to submit suggestions on the draft is October 27.

The draft policy seeks to increase women's participation in the labour force to 35% by 2030, and expand entrepreneurship and career guidance initia-

tives for youth. It also proposes a single-window for digital compliance, with self-certification and simplified returns for MSMEs. Promotion of green jobs, At-enabled safety systems, and transparent grievance redressal for workers, and a unified national labour data architecture ensuring interoperability and coherence and transparency in reporting are also part of the policy document.

Accountability plan Policy implementation will proceed in three phases. Phase 1 (2025-27) focuses on institutionalising labour and social security integration.

During Phase II (2027-30), the nationwide rollout of universal social security accounts, along with skill-centric systems, and district-level Employment Facilitation Cells. Phase III (beyond 2030) will bring in public-private governance, predictive analytics, and continuous policy renewal. "Progress will be tracked through real-time dashboards, a Labour & Employment Policy Evaluation Index (LEPEI) benchmarking States, and an Annual National Labour Report to Parliament," the document says.

WHO seeks clarification from India if cough syrup has been exported to other countries

Hindu Bureau
NEW DELHI



Cough syrup has been banned in several States.

The World Health Organisation (WHO) has sought clarification from India on whether the cough syrup, linked to over 15 child deaths in the country, have been exported to other countries, a senior official of the global health agency said on Wednesday.

The WHO is yet to issue a Global Medical Products Alert on Cough Syrup, the cough syrup which has allegedly caused the child deaths in Madhya Pradesh and Rajasthan. The officials added that the need for an alert will be investigated only after receiving response from Indian health authorities.

So far at least 17 children aged below five have died

chlorpheniramine maleate (CPM) and phenylephrine (PE) IP drug dropped "should not be used in children below four years of age."

Prescribed to treat symptoms of cold and cough, including runny nose, sneezing and sore throat and watery eyes, Cough syrup contains chlorpheniramine maleate, paracetamol and phenylephrine.

The Central Drugs Standard Control Organisation issued a directive on Wednesday to all State and Union Territory Drug Controllers, calling for strict enforcement of the Drugs Rules, 1945, with specific emphasis on quality control testing of raw materials and finished pharmaceutical products before release in the market.

The Hindu Bureau
NEW DELHI

The Union government is looking to showcase the PM-KISAN (Pradhan Mantri Kisan Yojana) scheme (PM-KISAN) as a model for other countries and island nations, Union Minister for Renewable Energy (MNRE) Prithvi Joshi said on Wednesday.

"We are looking to showcase the PM-KISAN (Pradhan Mantri Kisan Yojana) as a model for other countries and island nations through the ISA (International Solar Alliance) platform," Mr. Joshi said at a virtual event for the ISA's eighth General Assembly, scheduled later this month. The ISA, a global solar energy infrastructure in agriculture by setting up 100 GW of solar power plants in farmer-owned land. Launched in 2015, it was to have added a solar capacity of 308 GW by 2022, but has missed targets. The Centre then set a new target of 348 GW with a deadline of March 2026.

As of September 30, only one part of the scheme, where 17.5 lakh standalone rooftop solar pumps were to be installed has made notable progress, about 70% of the pumps have been installed. On the other hand, only 6% of decentralised grid-connected renewable energy power plants, and 16-25% of grid-connected solar pumps have been installed.

After delays, IAF set to receive first Tejas Mk1A fighter jet

Saurabh Tripathi
NEW DELHI

The Indian Air Force (IAF) is set to receive its first light combat aircraft (LCA) Tejas Mk1A on October 17 during a ceremony in Bangalore, marking a significant milestone in India's indigenous fighter jet programme.

According to officials, two Tejas Mk1A jets will be handed over to the IAF in the presence of Defence Minister Rajendra Singh. He will visit the Hindustan Aeronautics Limited (HAL) facility and interact with the staff involved in production.

HAL's contract to deliver 83 Tejas Mk1A aircraft, originally scheduled to begin in February 2024, has faced delays primarily due to slow engine deliveries from General Electric (GE Aerospace). With only one of two engines being supplied per month, the production targets completing deliveries within four years.

Negotiations for an additional 97 Tejas Mk1A fighters are in the final stages, with talks between the Ministry of Defence and GE Aerospace under way. Defence analysts point out that the IAF is operating with 29 squadrons and that it may take at least five years to bridge the capability gap. Even months after Operation Sindoor, no significant progress has been made in replenishing the depleted fighter squadrons. Recently, two MiG-21 squadrons have been decommissioned.

IAF Chief Air Chief Marshal Anur Pratap Singh recently voiced his concern, "Hungry months are not do, we are waiting for the food," he said, emphasising the need to maintain operational strength, the force requires two squadrons, 30 to 40 aircraft – produced every year. Meanwhile, the IAF's proposal to acquire 114 multi-role fighter aircraft (MRFA) continues to progress through procedural stages.

The Defence Ministry is considering a plan to procure "Made in India" Rafale jets, at least 18 expected to be delivered off-the-shelf in the near term.



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Cong. targets Centre over U.S.-Pakistan military deal

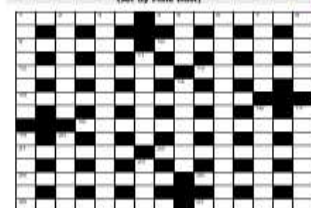
The Hindu Bureau
NEW DELHI

The Congress on Wednesday targeted the Centre for reports that the United States is set to supply Raytheon-manufactured air-to-air missiles to Pakistan, saying it shows how quickly "diplomats" are "backstabbing" the government.

Taking to social media platform X, Congress general secretary (Communications) Jai Prakash Narayan cited two public notifications of the U.S. Department of War on military contracts.

According to the notifications, the contract involves foreign military sales to over 30 countries, including the U.K., Germany, Australia, and Pakistan, with delivery expected by May 2030.

THE CROSSWORD 14609



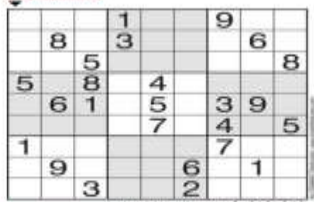
- Across**
- Get order slim guns at regular intervals (6)
 - Matrimonial scam with criminal abetting prison (8)
 - See, this river destroyed a man's asset (8)
 - Report of French writer (6)
 - Seaman's house in dry lake (4,4)
 - Musical piece taken from the beginnings of Saarabha's (4,2,3,4)

To solve this puzzle online, get access to our crossword site, or follow: <https://www.thehindu.com/crossword>



- Down**
- Perhaps ears used frequently to change one's mind? (8)
 - Will begin to operate pretty small and light boats (8)
 - Worthless exchanges? (4-3-4)
 - Singer Venus has range (4)
 - Multibaker? Described as one without any pupils! (4,2,3,4)
 - Somewhat lug at instrument (6)
 - As per Springer, all of us settle in room? (8)
 - Cur's cap held by two old ladies (7)
 - Heard knight succeed and outdo (7)
 - Killer without license, basically foreigner (8)
 - Put felt over reception area (6)
 - Burning cafe blames missing guards (6)
 - Pen position on the field? (3-3)
 - Intense waiting (6)

SUDOKU



FAITH

Winning the battle within

Dambodha, an asura, who undertook intense penance to Lord Brahma, asked for 1,000 kanchukas (armour) to protect his body. Each kanchuka could be destroyed only by one who had performed a minimum of 12 years of rigorous penance. Armed with his boon, he grew arrogant, troubling the Gods, sishis. He challenged Nara and Narayana, incarnations of Lord Vishnu, at Badarikashram. They took turns – while one preformed austerities for 12 years, the other fought Dambodha and broke a kanchuka. In this way, they destroyed 999 kanchukas. When only the last one remained, Dambodha fled to the Sun God for refuge. It is said that he was reborn later as Karma, who retained the final kanchuka.

In his previous birth, Duryodhana was an asura named Kati. He did severe penance to Lord Shiva. He asked for a wire like body so that no one could defeat him in his next life. But he committed a sin against Goddess Parvati. She cursed him and because of that curse, his torso was weakened. In his next birth as Duryodhana, he was strong but not invincible.

Thiruvakudalathal Venkatesh said in a discourse that Karma was known for his pride and ego. He often showed pomp and self-importance. He joined hands with Duryodhana, who was full of arrogance, haughtiness, and anger. Together, their qualities led them to stand against Dharmas. Lord Rama and Narayana were reborn as Arjuna and Krishna to defeat the evil pair of Duryodhana and Karma. We are influenced by evil forces such as anger, pride, and arrogance. To escape their clutches, we need the support and blessings of God, and we should pray for the same.

Draft labour policy unites social security schemes

It aims at creating universal, portable social security accounts for all workers by 2030; it also seeks to raise women's labour participation to 35%, offer single-window digital compliance for MSMEs

The Hindu Bureau
NEW DELHI

Universal and portable social security is a major component of the draft National Labour and Employment Policy, which proposes to create a universal account by integrating the Employees Provident Fund Organisation, Employees State Insurance Corporation, Pradhan Mantri Jan Arogya Yojana, e-SHRAM, and State welfare Boards.

The draft policy, known as the Shram Shakti Niti, 2025, was released on Wednesday for public consultation.

The proposals include the implementation of the Occupational Safety and Health Code with risk-based inspections, gender-sensitive standards, and the convergence of various skills schemes. The draft policy presents a renewed vision for a fair, inclusive, and future-ready world of work aligned with the national aspiration of a developed India by 2047, Union Labour Minister Mansukh Mandaviya said.

"Rooted in India's civilisational ethos of *śrama dharma*, the dignity and moral value of work, the



Workforce reforms : The policy envisions a labour ecosystem that improves protection and productivity for every worker. FILE PHOTO

policy envisions a labour ecosystem that ensures protection, productivity, and participation for every worker. It seeks to create a balanced framework that upholds workers' welfare while enabling enterprises to grow and generate sustainable livelihoods," Mr. Mandaviya said.

Policy outcomes

Expected outcomes of the policy include universal worker registration and social security portability, near-zero workplace fatalities, increased female la-

bour-force participation, a sharp reduction in informal jobs through digital compliance, AI-driven labour-governance capacity in all States, the creation of millions of green and decent jobs, and a fully converged "One Nation Integrated Workforce" ecosystem. The last date to submit suggestions on the draft is October 27.

The draft policy seeks to increase women's participation in the labour force to 35% by 2030, and expand entrepreneurship and career guidance initia-

tives for youth. It also proposes a single-window for digital compliance, with self-certification and simplified returns for MSMEs. Promotion of green jobs, AI-enabled safety systems, just-transition pathways for workers, and a unified national labour data architecture ensuring inter-ministerial coherence and transparent monitoring are also part of the policy document.

Accountability plan

Policy implementation will proceed in three phases. Phase I (2025-27) focuses on institutional setup and social-security integration.

During Phase II (2027-30), the nationwide rollout of universal social security accounts, along with skill-credit systems, and district-level Employment Facilitation Cells. Phase III (beyond 2030) will bring in paperless governance, predictive analytics, and continuous policy renewal.

"Progress will be tracked through real-time dashboards, a Labour & Employment Policy Evaluation Index (LPEI) benchmarking States, and an Annual National Labour Report to Parliament," the document says.

- The **draft National Labour and Employment Policy (NLEP)** aims to:
 - Create **universal, portable social-security accounts** for all workers by **2030**.
 - **Integrate** existing schemes like:
 - Employees' Provident Fund Organisation (EPFO)
 - Employees' State Insurance Corporation (ESIC)
 - Pradhan Mantri Jan Arogya Yojana (PMJAY)
 - e-SHRAM portal
 - State welfare boards
 - Raise **women's labour-force participation** to **35 %**.
 - Provide **single-window digital compliance** for **MSMEs**.
-

2. Vision and Framework

- Rooted in India's civilisational ethos of *Śrama Dharma* (dignity and moral value of labour).
- Seeks to create a **balanced labour-governance framework** ensuring:
 - Protection, productivity, and participation for every worker.
 - Sustainable livelihoods and enterprise growth.
- Aligned with **Shram Shakti Niti 2025** and national goal of a **developed India @ 2047**.

3. Key Provisions

(a) Occupational Safety & Health

- Risk-based inspections, gender-sensitive standards, and convergence of skills schemes.

(b) Digital Integration

- Single-window system for MSME compliance (self-certification + simplified returns).
- AI-enabled safety systems and labour data dashboards for **transparency & monitoring**.

(c) Green & Inclusive Jobs

- Promotion of **green jobs, AI-driven safety, just-transition** pathways for workers.
- Skill development and entrepreneurship support for youth.

4. Implementation Plan (Phased Approach)

Phase	Duration	Focus
Phase I (2025–27)	Institutional setup, social-security integration	
Phase II (2027–30)	Universal social-security rollout, digital labour governance	
Phase III (Beyond 2030)	Paperless governance, predictive analytics, continuous policy review	

5. Expected Outcomes

- Universal worker registration & social-security portability.
 - Near-zero workplace fatalities.
 - Increase in formal jobs and reduction in compliance burden.
 - Converged “**One Nation Integrated Workforce**” ecosystem.
 - Boost in women’s workforce participation to 35 % by 2030.
-

6. Accountability & Tracking

- Real-time dashboards and **state benchmarking**.
- Continuous review via **predictive analytics** and **digital data architecture**.

A. Historical Context

- **Labour reforms in India** began post-Independence with:
 - *Factories Act (1948), Minimum Wages Act (1948), EPF Act (1952).*
 - **Second National Commission on Labour (2002)** recommended consolidation of numerous laws → led to **four labour codes (2019–20)**:
 - **Code on Wages, Industrial Relations Code, Social Security Code, Occupational Safety & Health Code.**
 - The present draft **NLEP** is the next step toward "*Labour Governance 2.0.*"
-

B. Polity Angle

- Labour is a **Concurrent List subject** (Entry 22–24, Seventh Schedule, Article 246).
- Enables **centre-state cooperation** in welfare & safety standards.
- Reflects **Directive Principles of State Policy (DPSPs)**:
 - Article 38 – Promote welfare of people.
 - Article 39 – Ensure equal pay and adequate livelihood.
 - Article 41 – Right to work, education, public assistance.
 - Article 42 – Just and humane conditions of work.

C. Economic Significance

- **India's informal workforce** \approx 90 % of total labour; hence portability is crucial.
 - **MSMEs** = \sim 30 % of GDP & 48 % of exports \rightarrow digital compliance reduces friction.
 - **Female LFPR (PLFS 2023-24)** \approx 27 % \rightarrow target 35 % by 2030 aligns with SDG 5 (Gender Equality).
 - Supports **Atmanirbhar Bharat**, **Digital India**, and **Green Transition** goals.
-

D. International Comparison

- Mirrors **ILO's Recommendation 202 (2012)** on Social Protection Floors.
 - Countries like **Brazil (Bolsa Familia)** and **UK (Universal Credit)** already integrate welfare accounts \rightarrow India's move aligns with global best practices.
-

After delays, IAF set to receive first Tejas Mk1A fighter jet

Saurabh Trivedi

NEW DELHI

The Indian Air Force (IAF) is set to receive its first light combat aircraft (LCA) Tejas Mk1A on October 17 during a ceremony in Nashik, marking a significant milestone in India's indigenous fighter jet programme.

According to officials, two Tejas Mk1A jets will be handed over to the IAF in the presence of Defence Minister Rajnath Singh. He will visit the Hindustan Aeronautics Limited (HAL) facility and interact with the staff involved in production.

HAL's contract to deliver 83 Tejas Mk1A aircraft – originally scheduled to begin in February 2024 – has faced delays primarily due to slow engine deliveries from General Electric (GE Aerospace). With only one or two engines being supplied per month, HAL now targets completing deliveries within four years.

Negotiations for an additional 97 Tejas Mk1A fighters are in the final stages, with talks between the Ministry of Defence and GE Aerospace under way.

Defence analysts point out that the IAF is operating with 29 squadrons and that it may take at least five years to bridge the capabil-



The HAL's contract to deliver 83 Tejas Mk1A aircraft faced delays due to slow engine deliveries.

ity gap. Even months after Operation Sindoor, no significant progress has been made in replenishing the depleted fighter squadrons. Recently, two MiG-21 squadrons have been decommissioned.

IAF chief Air Chief Marshal Amar Preet Singh recently voiced his concern, "Hungry mouths are ready; we are waiting for the food," he said, emphasising that to maintain optimal strength, the force requires two squadrons – 30 to 40 aircraft – produced every year. Meanwhile, the IAF's proposal to acquire 114 multi-role fighter aircraft (MRFA) continues to progress through procedural stages.

The Defence Ministry is considering a plan to procure "Made in India" Rafales, with at least 18 expected to be delivered off-the-shelf in the near term.

- The **Indian Air Force (IAF)** will receive its **first two Tejas Mk1A Light Combat Aircraft (LCA)** on **October 17, 2025**.
 - Ceremony to be held at **Hindustan Aeronautics Limited (HAL), Nashik**, in presence of **Defence Minister Rajnath Singh**.
 - Marks a **significant milestone** in India's indigenous fighter jet development programme.
-

2. Background of the Tejas Programme

(a) Origins

- **Project initiated:** 1983
- **Objective:** Replace ageing **MiG-21 fleet** with an indigenous, multi-role, light combat aircraft.
- **Developer:** Aeronautical Development Agency (ADA) & **Hindustan Aeronautics Limited (HAL)** under DRDO.

(b) Earlier Variants

- **Tejas Mk1:** Already inducted; around 40 in IAF's 45 Squadron ("Flying Daggers").
- **Tejas Mk1A:** Upgraded version with modern avionics, radar, and electronic warfare systems.

3. HAL's Delivery Contract

- HAL signed a **₹48,000 crore contract** in **February 2021** to supply **83 Tejas Mk1A** aircraft (73 fighters + 10 trainers) to the IAF.
- Original delivery start: **February 2024**.
- Delay caused by **slow engine supply** from **General Electric (GE Aerospace, USA)**.
- Revised delivery: **October 2025**, with completion within **4 years** (by 2029).

4. Key Features of Tejas Mk1A

Parameter	Specification
Engine	GE F404-GE-IN20 (U.S. origin); talks ongoing for GE F414 co-production in India
Speed	Mach 1.6 (≈ 2,000 km/h)
Range	1,850 km
Weapons	Astra air-to-air missile, Derby, Python, laser-guided & anti-ship missiles
Radar	AESA (Active Electronically Scanned Array) radar
Features	Mid-air refuelling, electronic warfare suite, digital cockpit

5. Strategic Significance

- Strengthens **Atmanirbhar Bharat** initiative and **Make in India (Defence)**.
 - Reduces reliance on foreign fighter imports.
 - Enhances **IAF's operational flexibility** with a lighter, agile, multi-role aircraft suited for:
 - Air-to-air combat
 - Ground attack
 - Reconnaissance missions
-

6. IAF's Current Fleet & Requirements

- IAF operates only **29 combat squadrons**, vs. sanctioned strength of **42** (required for full operational readiness).
- Two **MiG-21 squadrons** recently decommissioned.
- IAF requires **30–40 new fighters per year** to maintain balance.
- Hence, India also pursuing:
 - **114 Multi-Role Fighter Aircraft (MRFA)** tender (foreign participation).
 - **97 additional Tejas Mk1A** under negotiation.
 - **Made-in-India Rafale** proposal (18 to be produced domestically).

Era	Aircraft	Organisation	Status
1950s	HF-24 Marut	HAL (with German designer Kurt Tank)	First indigenous fighter jet
1983–2001	LCA Tejas Project	ADA & DRDO	Design & prototype phase
2016	LCA Tejas Mk1	HAL	Operational induction
2025	LCA Tejas Mk1A	HAL	Upgraded, mass production
2030+ (planned)	AMCA (Advanced Medium Combat Aircraft)	ADA	5th-generation stealth fighter under development

B. Economic Significance

- Indigenous defence manufacturing saves **\$5–6 billion annually** in import bills.
 - Generates **employment for over 10,000 engineers & technicians**.
 - HAL facilities in **Nashik, Bengaluru, and Koraput** are key manufacturing hubs.
-

C. Technological Aspects

- **AESA radar**: Detects multiple targets, offers electronic countermeasures.
 - **Fly-by-wire control system**: Enhances manoeuvrability.
 - **Composite airframe**: 45% lighter than conventional metal.
 - **Net-centric warfare capable**: Integrated with IAF's AFNET.
-

D. Strategic & Defence Angle

- Strengthens India's **self-reliance in combat aviation** under *Defence Production and Export Policy 2020*.
- Supports India's export ambitions to nations like:
 - **Malaysia, Argentina, Philippines, and Egypt** (LCA bids submitted).
- Complements indigenous systems like **Akash missile, BrahMos, and Arjun MBT**.

Fact

Developer

Manufacturer

Engine

Speed

Range

Contract Value

Delivery Timeline

Indigenisation Level

IAF Requirement

Next-gen Fighter

Detail

ADA & HAL

HAL

GE F404 (to be replaced by GE F414 in future)

Mach 1.6

1,850 km

₹48,000 crore

2025–2029

~70%

42 squadrons

AMCA (under development)

India to boost solar pumps scheme in Africa, island nations

The Hindu Bureau
NEW DELHI

The Union government is looking to showcase the PM-KUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan) programme to several African countries and island nations, Union Minister for Renewable Energy (MNRE) Pralhad Joshi said on Wednesday.

“We are looking to showcase both the PM-KUSUM and the PM Surya Ghar (for rooftop solar installations) programme in countries which have problems with connectivity. We are doing this in Africa and island countries through the ISA (International Solar Alliance) platform,” Mr. Joshi said at a curtain-raiser event for the ISA’s eighth General Assembly, sche-

duled later this month. The ₹34,000-crore PM-KUSUM programme is meant to boost solar energy infrastructure in agriculture by setting up 100 GW of solar power plants in farmer-owned land. Launched in 2019, it was to have added a solar capacity of 308 GW by 2022, but has missed targets. The Centre then set a new target, of 348 GW with a deadline of March 2026.

As of September 30, only one part of the scheme, where 17.5 lakh standalone solar pumps were to be installed has made notable progress. About 70% of the pumps have been installed. On the other hand, only 6% of decentralised grid-connected renewable energy power plants, and 16%-25% of grid-connected solar pumps have been installed.

- The **Government of India** plans to **showcase the PM-KUSUM scheme** (Pradhan Mantri Kisan Urj Suraksha evam Utthaan Mahabhiyan) in **African countries and island nations**.
 - This will be done via the **International Solar Alliance (ISA)** platform.
 - Aim: Promote **solar energy infrastructure in agriculture** and strengthen **India's renewable diplomacy**.
-

2. Key Stakeholders

- **Ministry:** Ministry of New and Renewable Energy (MNRE)
 - **Minister:** Prahlad Joshi
 - **Platform:** International Solar Alliance (ISA)
 - **Schemes showcased:**
 - **PM-KUSUM:** Solar energy for irrigation and agriculture.
 - **PM Surya Ghar:** Rooftop solar installations for households.
-

3. About PM-KUSUM Scheme

(a) Launched: 2019

(b) Objective:

- Promote solar power in agriculture by:
 1. Setting up **100 GW of solar power plants** on farmers' land.
 2. Installing **17.5 lakh standalone solar pumps**.
 3. Providing **decentralised grid-connected solar power plants**.

(c) Budget: ₹34,000 crore.

(d) Target:

- Originally – 308 GW by 2022.
 - Revised – **348 GW by March 2026** (due to delays).
-

4. Progress (as of September 2025)

Component	Target	Achievement
Standalone solar pumps	17.5 lakh	70% installed
Decentralised renewable energy power plants	—	6% installed
Grid-connected solar pumps	—	16–25% installed

5. International Expansion

- India plans to **replicate the KUSUM and Surya Ghar models** in:
 - **Africa** (Kenya, Tanzania, Ethiopia, Ghana, etc.)
 - **Island nations** (Maldives, Mauritius, Seychelles, Pacific nations).
- Aim: Help countries with **connectivity and energy access challenges**.
- To be formally presented during the **8th ISA General Assembly**.

A. About the International Solar Alliance (ISA)

- **Founded:** 2015 (Paris Climate Conference, COP21).
 - **Headquarters:** Gurugram, India.
 - **Members:** 120+ countries (mainly between Tropic of Cancer and Tropic of Capricorn).
 - **Motto:** *"One Sun, One World, One Grid."*
 - **Objective:** Promote solar energy and reduce dependence on fossil fuels.
 - **India & France** are founding members.
-

B. Significance for India

- Strengthens India's image as a **leader in global renewable diplomacy**.
 - Aligns with India's **Net Zero by 2070** goal (announced at COP26, Glasgow).
 - Enhances **South–South Cooperation** and **climate finance credibility**.
 - Boosts domestic solar equipment manufacturing under **Atmanirbhar Bharat**.
-

C. Economic Angle

- Reduces **diesel dependence** in agriculture → lowers import bills.
- Increases farmer income by enabling **dual use of land** (farming + solar).
- Encourages **private sector participation** and **MSME growth** in solar pump manufacturing.

G. Challenges

- **Slow implementation:** Delays in subsidy disbursement and equipment supply.
 - **Financial viability:** Farmers' upfront cost and distribution companies' (DISCOMs) payment issues.
 - **Land and water-use conflicts** in rural areas.
 - **Low adoption rate** of decentralised solar grids.
-

H. Expected Outcomes

- Expansion of **India's solar diplomacy footprint**.
 - Acceleration toward **energy security and green growth**.
 - Potential creation of **1.5–2 lakh new jobs** in installation, maintenance, and solar manufacturing sectors.
-

Text & Context

THE HINDU

NEWS IN NUMBERS

Men assaulted while transporting cattle in Maharashtra

7 In Maharashtra's Jalgaon district men were assaulted by a group accusing them of transporting cattle for slaughter. The victims said they were moving 17 bulls for agricultural purposes with valid documents when attacked with sticks and lags. Police rescued the injured men and seized the cattle. —

Children rescued by BPF from Eastern railway stations

13 The Railway Protection Force (RPF) rescued 13 children, including eight minors allegedly being trafficked, from various stations under the Eastern Railway. One suspected trafficker was arrested at Sahibganj railway station while attempting to take the children to Delhi for labour work. —

Number of road repair projects launched by the Delhi PWD

153 The Delhi Public Works Department (PWD) will undertake 153 road repair projects under the Central Road and Infrastructure Fund before winter to improve road quality. The ₹600-crore plan, approved by the Centre, covers 65 roads in the east, 33 in the north, and 55 in the south zones. —

Fine imposed by DGCA on IndiGo over lapse in pilot training

20 lakh. The Directorate General of Civil Aviation (DGCA) has imposed a ₹20 lakh penalty on IndiGo for allegedly failing to use qualified simulators for pilot training at Category C aerodromes. The airline's parent company, IndiGo Aviation Ltd, said it is contesting the order. —

The value of banned tobacco seized in Palghar

13.99 crore. In T lakh. The confiscated items included 100 kg of banned pan masala and other prohibited tobacco products. An FIR has been filed under the Bharat Nigraha Sabha and Food Safety and Standards regulations. —

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Are workers' rights being eroded?

What happened at the Shachi Industries chemical factory in Telangana when a chemical reactor burst? What has the International Labour Organization (ILO) said about industrial accidents? What laws are in place in India that protect workers' rights?

EXPLAINER

Gautam Mody

The story so far

On June 30, at the Shachi Industries chemical factory in Telangana, 40 workers were killed when a chemical reactor burst. Chemical workers were injured. Barely a day later, on July 1, eight workers were killed in an explosion at Golkonda Petrochemicals in Sivakasi, Tamil Nadu. And yet again on September 30, nine workers died when a 10-metre-high coal-handling plant collapsed at Chennai's Ennore Thermal Power Station. The British Safety Council estimates that one in four fatal workplace accidents worldwide occur in India. This is a conservative figure, given the widespread under-reporting of workplace injuries and deaths, especially among contract and informal workers whose employment is neither registered nor protected by law.

Why do workplace accidents occur?

Accidents occur not because they are inevitable but because employers fail to prevent them. Prevention means eliminating hazards through proper workplace design, equipment maintenance, safety systems, and by enforcing protective procedures and training all workers and supervisors exposed to risk.

The Telangana explosion is a case in point. The reactor was operating at twice the permissible temperature. No alarms went off, and no safety officer intervened. The machinery was outdated, maintenance was ignored, and repeated worker complaints were dismissed. When the blast occurred, workers jumped factory walls to save themselves. The required on-site ambulance was missing, and the injured were taken to the hospital in a damaged company bus. Even after a week, authorities could not determine how many were "missing" which is clear evidence that unregistered workers were



On rescue. Scaffolding came crashing down at the Ennore plant, Chennai on September 30. (A. Mohan)

working in a highly hazardous plant with no entry or exit records. The Ennore collapse also followed the same pattern. The coal-handling structure fell likely due to faulty design, poor-quality scaffolding, or inadequate anchoring.

The International Labour Organization (ILO) has confirmed that industrial accidents are rarely random. They occur because managements cut corners, underinvesting in safety to reduce costs and maximise profit. Even when employers blame "human error", the real cause lies in employer practices: long working hours, inadequate rest, excessive work pressure, or wages so low that workers are forced to take double shifts.

What are the laws in place in India?

Workers have fought for safer workplaces since the dawn of the industrial age. The first Factories Act in India was enacted in 1881. After Independence, the Factories Act, 1948 became the cornerstone of

labour regulation. It governed everything from factory licensing and machinery maintenance to working hours, rest breaks, canteens, and creches based on the principle that decent working conditions and safety go hand in hand. The Act also saw amendments in 1976 and 1987, the latter prompted by the Bhopal Gas Tragedy. These laws were enforced through licensing and inspection, and a combination of scheduled and surprise checks. Though imperfect, this allowed workers, especially unionised ones, to file complaints and compel employers to act. But the Bhopal tragedy exposed its limits — inspections could be bribed away, records falsified, and violations ignored.

India's mechanisms to compensate injured or deceased workers — the Workmen's Compensation Act, 1923 and Employees' State Insurance Act, 1948 — recognise compensation for loss of earnings, including lifetime income. However, in practice, such compensation

remains meagre. More importantly, these laws do not hold employers criminally accountable. When such accidents draw media attention, governments announce ex gratia payments from public funds. This turns compensation into charity and absolves employers of responsibility.

What is the situation now?

Since the 1980s, labour protections have been systematically dismantled. Employers demand "flexibility" including freedom to hire, fire, and extract work without oversight. Governments have obliged by weakening inspections, diluting laws, and branding safety regulations as "obstacles to business." For example, in 2015, the Maharashtra government allowed employers to "self-certify" compliance with labour laws. And the BJP government's "Ease of Doing Business" campaign has pushed other States to follow.

The Occupational Safety, Health and Working Conditions (OSHWC) Code, 2020, which seeks to replace the Factories Act, epitomises this shift. Though currently in abeyance, once enforced it will remove health and safety from being a statutory right to executive discretion. What once was a worker's right will become government generosity. At the same time, States have increased their working hours, a practice started during the COVID pandemic, which is a major blow to safety. In 2023, Karnataka made this permanent, increasing daily limits and reducing rest periods.

It is well established that safe workplaces enhance productivity and profits. Yet India's dominant business culture is not about sustainable profits but extracting the maximum from labour with minimal responsibility. Until the state restores workplace safety as a right, rebalances inspection as enforcement, and holds employers criminally liable for preventable deaths, workers' lives will always hang in the balance.

Gautam Mody is General Secretary of the New Trade Union Initiative.

THE GIST

➤ The British Safety Council estimates that one in four fatal workplace accidents worldwide occur in India. This is a conservative figure, given the widespread underreporting of workplace injuries and deaths.

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What was behind the 'I Love Muhammad' movement?

How did the protests spread to other cities and States? How have Muslim bodies and political parties reacted?

Zeha Us Salam

The story so far

On September 4, in Kanpur's Rawatpur area, a few young men put up a lightboard at the protest site of a late in Syed Nagar on the procession route with the words, "I Love Muhammad" written in English. It was put up as part of celebrations around the Prophet's birthday. Some Hindu groups claimed it was in contravention of rules of religious processions in the State. A scuffle ensued and after FIRs were filed against 15 unidentified people and nine identified persons, the row spread to other cities of Uttar Pradesh before burning over to other States. It soon developed into a debate on the right to freedom of religion.

What happened?

While Kanpur witnessed little violence, barely saw protests as well as the use of

bulldozers on the private properties of some of those allegedly involved in the violence, including the son-in-law of the Uttar Pradesh Chief Minister. Tanzeem Khan Khan, who calls a thousand Muslims had gathered at the protest site on September 26, to protest against the State's alleged ban on the "I Love Muhammad" slogan. The police, after initially permitting the protest, withdrew it shortly before the prayers. Though Mr. Khan made a belated appeal to followers to disperse following the denial of police permission, many people had already gathered. The police resorted to lathi-charge to disperse the protestors. Next day, private properties of Mr. Khan's relatives and a doctor said to be close to him were destroyed.

Residents of Unnao too, found themselves in similar hot waters with local Muslim youth organising processions holding "I Love Muhammad" placards and chanting religious slogans.

Clashes were reported as the police objected to the use of boards with the said slogan. It led to eight FIRs and arrests of five individuals. Meanwhile, in Maharashtra, police did not give permission for a procession leading to further alienation of local residents who led in the police action a denial of their right to freedom of religion. The police action did, however, thwart the possibility of any violence.

What about other States?

In the neighbouring State of Uttaranchal, Muslim residents alleged that police response was disproportionate to a peaceful march where the protestors held up placards with "I Love Muhammad" written on them and called for the cancellation of FIRs in Kanpur. Soon the row spread to Gujarat, Madhya Pradesh and Madhya Pradesh before hitting Telangana, the first non-BJP-ruled state to report a problem around the

slogan. By then, "I Love Muhammad" posters had spread across the country with people using the slogan as part of their social media handles. It is being seen as the Muslim community's response to the allegedly excessive use of force first by the U.P. police followed by its counterparts in other States.

What lies ahead?

What began as a localised dispute in Kanpur grew into a nationwide debate on freedom of expression, right to equality and freedom of religion. The Association for Protection of Civil Rights, which investigated the controversy, found that 21 FIRs were lodged, over 1,324 individuals from the Muslim community booked, and 36 people are arrested in Uttar Pradesh and other States.

The Janasiksha-Islami Hind has called for the cancellation of FIRs against members of the community and dubbed the criminalisation of the "I Love Muhammad" slogan ultra vires as it went against Articles 19, 20 and 25 of the Constitution. Meanwhile, the All India Muslim Personal Board called for the immediate release of Mr. Khan and others. A delegation led by the Leader of the Opposition in Uttar Pradesh, Man Prasad Pandey, was restrained from reaching Bareilly. The Samajwadi Party MP Nigra Huda was also detained by the police and Sanjay Singh Ziaur Rehman Barq was placed under house arrest.

THE GIST

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What happened?

While Kanpur witnessed little violence, Bareilly saw protests as well as the use of

bulldozers on the private properties of some of those allegedly involved in the violence, including the son-in-law of Ittehad-e-Millat Council chief Maulana Tauqueer Raza Khan, on whose call a thousand Muslims had gathered at Islamia grounds on September 26, to protest against the State's alleged high-handedness in Kanpur. The police, after initially permitting the protest, withdrew it shortly before the prayers. Though Mr. Khan made a belated appeal to followers to disperse following the denial of police permission, many people had already gathered. The police resorted to lathi-charge to disperse the protestors. Next day, private properties of Mr. Khan's relatives and a doctor said to be close to him were destroyed.

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India's solar capacity hits 125 GW, 3rd largest globally: Joshi

ARUNIMA BHARADWAJ
New Delhi, October 8

INDIA'S SOLAR POWER generation capacity has reached 125 gigawatts (GW), making it the world's third-largest solar energy producer, Union minister for new and renewable energy Pralhad Joshi said on Wednesday.

"As per COP28 outcome, the world's renewable energy (RE) capacity will triple to 11,000 GW by 2030. And solar power is the single greatest key to achieving both of these ambitions," Joshi said addressing the curtain raiser of the 8th session of the International Solar Alliance Assembly.

The minister added that the country is targeting 1,800 GW of non-fossil fuel capacity by 2047, with current renewable energy (RE) capacity standing at approximately 252 GW.



The country targets 1,800 GW of non-fossil fuel capacity by 2047, renewable energy minister Pralhad Joshi said

The country has a target of achieving 500 GW RE capacity by 2030, of which 300 GW is likely to come from solar energy, as per government's estimates. "We have 162 GW in

the pipeline. I am confident that we will achieve that goal," Joshi added.

Santosh Kumar Sarangi, secretary of the new and renewable energy ministry, said discussions are underway among stakeholders on whether India can further raise its installed capacity from non-fossil fuel sources.


The secretary also noted that the US tariff negotiations do not impact India's solar module exports.

"Our solar module exports are not very huge. Domestic consumption of modules has been very high due to utility-scale solar projects, as well as schemes like PM Kusum and PM Surya Ghar," he said.

Currently, India has 100 GW of domestic solar module manufacturing capacity and 27 GW of cell manufacturing capacity.

- India's **installed solar power capacity** has reached **125 GW**, making it the **world's third-largest solar energy producer**, after:
 1. **China** (≈ 550 GW)
 2. **United States** (≈ 190 GW)
- Announcement made by **Union Minister for New and Renewable Energy (MNRE) Prahlad Joshi** at the **8th Session of the International Solar Alliance (ISA)** in New Delhi.

2. Key Targets and Projections

Target Year	National Goal	Solar Share	
2030	500 GW of total Renewable Energy (RE) capacity	≈ 300 GW from solar power	
2047 (<i>Amrit Kaal</i>)	1,800 GW of non-fossil fuel capacity	Major share from solar & wind	

- India currently has **252 GW RE capacity**, of which **125 GW = solar** ($\approx 50\%$).
- Government envisions **1,800 GW non-fossil capacity by 2047** → aligned with **Net Zero by 2070 pledge** (COP26 Glasgow).

3. Government Schemes Driving Solar Growth

(a) PM-KUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan)

- ₹34,000 crore scheme to install **solar pumps & decentralised plants** for farmers.

(b) PM Surya Ghar Muft Bijli Yojana

- Rooftop solar programme for residential users.

(c) Solar Park Scheme & Solar Cities Programme

- Encourages utility-scale projects & urban renewables.

(d) Domestic Manufacturing Boost

- India has **100 GW module & 27 GW cell manufacturing capacity**.
 - Backed by Production Linked Incentive (PLI) Scheme for High-Efficiency Solar PV Modules (₹19,500 cr).
-

6. Environmental Significance

- Solar energy contributes $\approx 40\%$ to India's non-fossil electricity capacity.
 - Key to meeting:
 - **SDG 7:** Affordable and Clean Energy
 - **SDG 13:** Climate Action
 - Cuts annual CO₂ emissions by ≈ 180 million tonnes.
-

7. Institutional & Policy Framework

- **Ministry:** MNRE – nodal body for RE development.
- **Major Policies:**
 - *National Solar Mission (2010)* – part of NAPCC.
 - *Green Energy Corridor* – transmission for RE integration.
 - *Renewable Purchase Obligation (RPO)* – mandates DISCOMs to source specified % from renewables.
 - *Solar Open Access Rules (2022)* – facilitate direct consumer purchase.

- India has high solar irradiation (4–7 kWh/m²/day) in most states.
 - Major solar parks:
 - **Bhadla (14 GW, Rajasthan)** – world's largest solar park.
 - **Pavagada (Karnataka), Kurnool (Andhra Pradesh).**
 - **Desert states** ideal for utility-scale solar projects.
-

C. Polity & International Linkages

- **Article 48-A** – State to protect environment & resources.
 - **Article 51-A(g)** – Fundamental duty of citizens to protect environment.
 - **Paris Agreement (2015) & COP26–COP28 commitments** guide India's targets.
-

D. Challenges

1. Intermittent supply (no sun at night).
 2. Land acquisition issues.
 3. Battery storage costs.
 4. Grid integration and infrastructure gaps.
 5. Dependence on imports of solar cells & wafers (from China).
-

Fact	Detail
India's Installed Solar Capacity (2025)	125 GW
Global Rank	3rd
Target by 2030 (RE)	500 GW
Solar Target by 2030	300 GW
Non-Fossil Target by 2047	1,800 GW
Ministry in charge	MNRE
ISA HQ	Gurugram
India's Net Zero Year	2070

Ronaldo 1st Football Billionaire
With Saudi Club Contract

- Cristiano Ronaldo, 40, is in the twilight of his playing career but with his contract at Saudi Arabia's Al-Nassr, he is now **one of the few athletes who can be counted among billionaires**
- For a long time, **Ronaldo and Lionel Messi**, who duelled for the title of greatest player, earned similar wages. But they diverged in 2023 with Ronaldo's move to the Gulf

Source: Bloomberg

TIMES BUSINESS

THE TIMES OF INDIA, JAIPUR | THURSDAY, OCTOBER 9, 2025



\$1.4bn Ronaldo's fortune comprises a mix of endorsements, career earnings and investments



15% Stake in Al-Nassr he reportedly received as part of his contract extension

- Ronaldo's fortune is distinct among **billionaire athletes** in that the majority is derived from pay. The driver of Roger Federer's wealth, for example, comes from a stake he took in running apparel brand On

Net Worth	
Michael Jordan	\$3.5bn
LeBron James	\$1.5bn
Cristiano Ronaldo	\$1.4bn
Tiger Woods	\$1.4bn
Roger Federer	\$1.3bn

Note: Jordan figure as of 2023. James, Woods figures as of 2024. Federer figure as of June 2025

Word of the day

Prosaic:

not fanciful or imaginative; lacking wit or imagination; not challenging; dull and lacking excitement

Synonyms: earthbound, pedestrian, commonplace, humdrum, unglamorous, matter-of-fact

Usage: *It was a prosaic and unimaginative essay.*

Pronunciation: newsth.live/prosaicpro

International Phonetic Alphabet: /pɹəʊ'zeɪ.ɪk/



Thank you 😊

