

DAILY CURRENT AFFAIRS (DCA)

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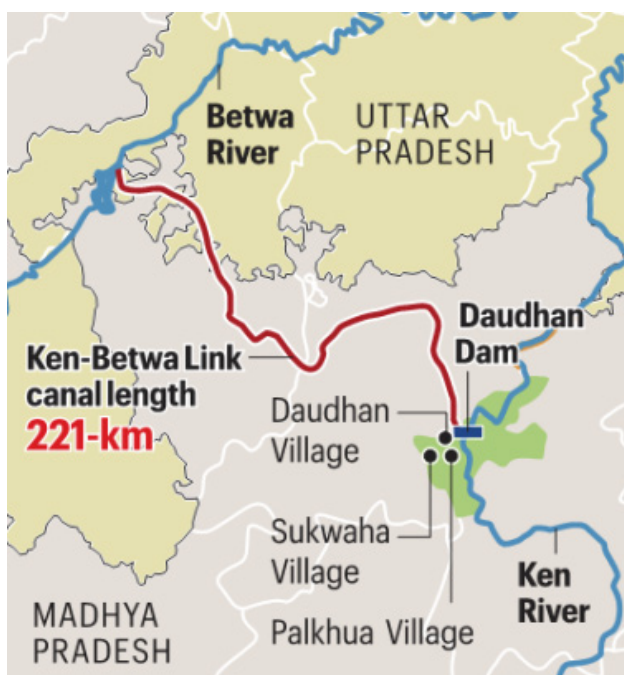
RESISTANCE AGAINST KEN-BETWA LINK PROJECT

In News

Adivasi people in Madhya Pradesh are protesting against the Ken-Betwa river-linking project for fear of mass displacement, degradation of their ancestral woods, and loss of their traditional identity.

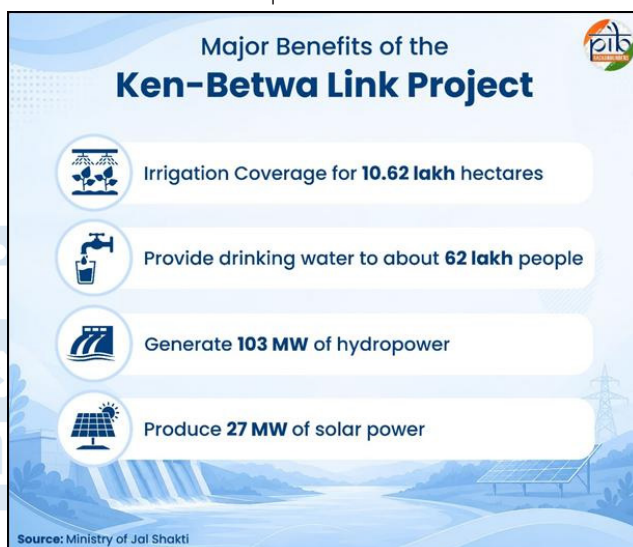
Ken-Betwa Link Project (KBLP)

- It is a major water-resources development project for the Bundelkhand region of Madhya Pradesh and Uttar Pradesh, aimed at mitigating long-standing problems of water scarcity and irrigation.
- It envisages transferring water from the Ken basin to the Betwa basin through a system of the Daudhan Dam, a connecting canal, and accompanying works.
- It is the priority project under the National Perspective Plan for Interlinking of Rivers to move into the execution stage.
- **Phases:** It has two phases.
 - ♦ Phase I will involve building the Daudhan Dam complex and its subsidiary units such as the Low-Level Tunnel, High-Level Tunnel, Ken-Betwa Link Canal, and powerhouses.
 - ♦ Phase II will involve three components — Lower Orr Dam, Bina Complex Project, and Kotha Barrage.



Benefits of The Ken-Betwa Link Project (KBLP)

- It will increase irrigation, drinking water supply, jobs and infrastructure in the water-stressed Bundelkhand area of Madhya Pradesh and Uttar Pradesh.
- It will improve drought resilience, agricultural production and incomes, reduce distress migration and improve access to markets, schools and health services.
- Roads, bridges and connectivity linked with the project might bring additional benefits to adjacent villages.
- It tries to achieve a balance between water security and socio-economic advantages, and responsible management of land, environmental and social consequences.



Assessment and Clearance

- The environmental impacts of the Ken-Betwa Link Project (KBLP) were assessed through detailed environmental studies as part of the statutory clearance process.
- The project has received all the statutory clearances needed under law, including Environmental Clearance (2017), Wildlife Clearance (2016), Clearance from the Ministry of Tribal Affairs (2017), and Forest Clearance (2023), subject to prescribed conditions and mitigation measures.
- The project is also implementing various environmental management, compensatory afforestation, wildlife conservation, and biodiversity protection measures to address and minimize the identified environmental impacts.

Concerns and Criticism

- **Water diversion:** Ken water could be diverted from portions of Bundelkhand that depend on the river.
- **Downstream impact:** Reduction in natural flow may affect drinking water, irrigation, agriculture and ground recharge in downstream areas, especially around Banda, Mahoba and Chhatarpur.
- **Environmental impact:** The construction of Daudhan dam may result in large-scale submergence, deforestation and changes in the natural river system of Ken.
 - ♦ The Daudhan Dam would inundate a major portion of Panna National Park and Tiger Reserve, possibly covering some 98 sq km of protected land and forcing the removal of some estimated 2–3 million trees.
- **Impact assessment concerns:** Critics say the available environmental studies do not properly examine the repercussions for downstream villages, water supply, agriculture and ecosystems.
 - ♦ Research has warned that big-scale water transfers could impact land-atmosphere interactions and regional rainfall.
- **Regional equity:** The main issue is whether the water of Bundelkhand should be used for the purposes of Bundelkhand itself before it is taken out of the region.
- **Displacement and compensation:** The project is also projected to displace roughly 5228 families in Chhatarpur and 1400 in Panna socially.
 - ♦ There have been protests over compensation and perceived inadequate benefits to communities affected.

Conclusion

- Ken-Betwa Link Project is a major step to solve the age-old socio-economic and water problems of Bundelkhand.
- However, its success depends a lot on stringent mitigation protocols like landscape-level wildlife conservation, compensatory afforestation and transparent rehabilitation to ensure that environmental damage does not outweigh human gain and the infrastructure provides long-term agricultural stability and power.

Source: TH

INDIA'S REVISED FDI FRAMEWORK

Context

- As of August 20, 2026, **29 FDI proposals worth ₹4,895.65 crore** have been reported under **India's revised framework**, highlighting a shift towards facilitating investment while retaining safeguards.

About Foreign Direct Investment (FDI)

- It refers to **investment by an entity or individual** of one country into a business located in another country with a **lasting interest and significant influence** over management.
- It generally involves a longer-term commitment and can bring capital, technology, managerial expertise and global market access, unlike portfolio investment.
- In India, FDI is **regulated through sectoral caps, entry routes and conditions** under the **Foreign Exchange Management Act (FEMA), 1999**, and related rules.
- Investments may enter through the **automatic route** or the government route.

Importance & Significance

- **Capital Formation and Infrastructure Funding:** FDI adds to domestic savings to finance significant capital projects, transport infrastructure and industrial output capacity.
- **Technologies and Innovation Transfer:** Bringing innovative technologies, proprietary automation systems and organisational structures from multinational firms to domestic industry.
- **Employment Generation:** FDI inflows are associated with greenfield investments in manufacturing and services, generating skilled and unskilled jobs, and developing local vendor ecosystems.
- **Export Competitiveness:** Foreign firms' use of local suppliers in global value chains improves domestic export capabilities and creates foreign exchange reserve.
- **Skill Development and Human Capital:** Exposure to global best practices, continuous technical training and corporate governance norms for local management through foreign entry.
- **Fiscal Strengthening:** Host governments raise greater revenue from corporate income taxes, tariffs and levies based on the economic activities of foreign enterprises.

Key Reforms Related to India's FDI

- **Land Bordering Countries (LBCs)-related FDI (2026):** It allows entities having **non-controlling ownership of up to 10% from Land Bordering Countries (LBCs)** to invest through the **automatic route**.
 - ♦ The beneficial ownership test is applied at the **investor-entity level**.
 - ♦ Subject to sectoral caps, entry routes and other applicable conditions.
 - ♦ Intended to reduce approval-related delays while retaining safeguards.
 - ♦ The **current reform** aims to reduce uncertainty, shorten transaction timelines and improve the investment climate.
 - ♦ The 29 reported proposals span **IT, AI, information and communication, manufacturing, pharmaceuticals, data centres and transport services**, with investors from jurisdictions including Mauritius, the US, South Korea, Japan, Singapore, Luxembourg and the Cayman Islands.
- **Amendment to FEMA (Non-Debt Instruments) Rules, 2019:** The revised provisions were notified on **1 May 2026**.
 - ♦ Eligible investors can proceed without additional prior government approval, while complying with prescribed reporting requirements.
- **Prior Government Approval:** It was introduced in **2020** for FDI where the beneficial owner was situated in, or was a citizen of, a country sharing a land border with India.
 - ♦ The measure was primarily aimed at preventing opportunistic takeovers and protecting strategic assets during heightened economic-security concerns.
- **Liberalisation of FDI Entry Routes:** Over the years, India has progressively shifted several sectors from the government route to the **automatic route**, reducing administrative barriers and improving investment predictability.
- **Higher Sectoral FDI Limits:** The government has increased FDI limits in selected sectors, including **defence, insurance, telecom and space**, subject to specified conditions, to attract capital and technology.

National Single Window System (NSWS):

The **NSWS**, developed under the Department for Promotion of Industry and Internal Trade (DPIIT), provides investors with a single digital interface for identifying and applying for various government approvals.

Related Issues & Concerns

- **Regulatory Complexity:** The multi-tiered central and state authorities produce bureaucratic coordination that leads to chronic delays in project implementation.
- **Uneven Flow:** Foreign investment continues to pour into a handful of industrialised states (Maharashtra, Gujarat, Karnataka, Tamil Nadu, Delhi) with eastern and interior regions being left far behind.
- **Geopolitical Risk:** Larger trade wars and global policies change the flow of capital depending on political allegiance not market efficiency
- **Threat to Domestic MSMEs:** Unregulated enormous infusion of foreign capital into retail or local manufacturing might put small-scale domestic businesses under pressure to compete with global economies of scale.
- **Policy Volatility & Tax Disputes:** Customs taxes, localised compliance mandates, and industry-specific taxation standards generate operational uncertainty for international companies.

Way Forward

- India should maintain a **risk-based FDI regime** that distinguishes passive, non-controlling investment from investments involving strategic control.
- Strong beneficial-ownership verification, inter-agency information sharing and post-investment monitoring can prevent circumvention without unnecessarily delaying genuine investment.
- The broader objective should be to combine **capital and technology inflows with national security, domestic capability-building and transparent regulation**.
- Predictability in FDI rules, faster clearances and targeted safeguards can help India remain an attractive destination for global investment.

Source: News On AIR

INDIA-U.K. STRATEGIC AND DEFENCE COOPERATION

Context

- India and the United Kingdom reviewed their defence-industrial cooperation, military exchanges and maritime security partnership during the **25th India-U.K. Defence Consultative Group (DCG) meeting** held in New Delhi.

Key Developments in India-U.K. Defence Cooperation

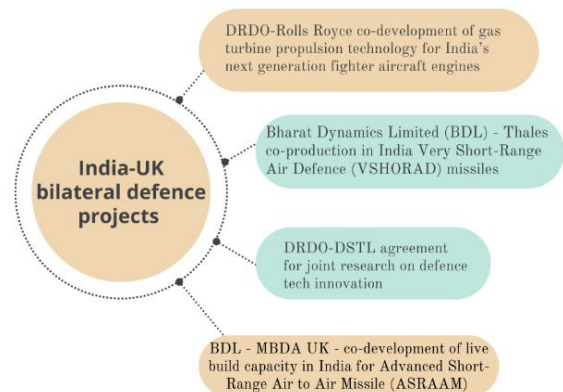
- Defence Industrial Cooperation:** India and the U.K. reviewed ongoing defence-industrial cooperation with a particular focus on research and development (R&D) under the **India-U.K. Vision 2035** and the **10-year Defence Industrial Roadmap**.
- Both the nations are cooperating on the establishment of the **Regional Maritime Security Centre of Excellence (RMSCE)** under **India's Indo-Pacific Oceans Initiative (IPOI)** to strengthen regional maritime security capabilities.
- Military Cooperation:** Agreed to expand exchanges between the armed forces through joint exercises, training programmes and capacity-building initiatives.

Brief on India-UK Relations

- India-U.K. Comprehensive Strategic Partnership:** Upgraded in 2021, with a 10-year roadmap to strengthen cooperation across trade, defence, technology, health and other areas.
 - India and the U.K. hold a 2+2 dialogue involving their Foreign/External Affairs and Defence Ministers.
- Trade Relations:** India is the UK's **11th** largest trading partner, while the UK ranks **14th** for India.
 - India – UK bilateral trade (both goods and services) stood at £47.9 billion in the four quarters to the end of Q4 2025, an increase of 10.0% or £4.3 billion in current prices from the same period in 2024
 - India-UK Comprehensive Economic and Trade Agreement (CETA) which entered into force on 15 July 2026, provides an unprecedented dutyfree access to 99 per cent of India's exports to the UK, and 91 % of UK's exports covering nearly 100% of the trade value.

- This includes labour-intensive sectors such as textiles, leather, marine products, gems and jewellery, and toys as well as high-growth sectors like engineering goods, chemicals, and auto components

- Defence and Security:** The UK contributed only **3%** of India's defence imports in the last decade.
 - India aims to diversify from Russian defence imports & develop indigenous defence industries.
 - The UK can aid in technology transfers & advanced defence capabilities.
 - Open General Export Licence (OGEL) (2022) – UK's first such license for an Indo-Pacific country, easing military tech exports to India.



- Joint Exercises: Ex Ajeya Warrior, Exercise Konkan, Ex Cobra Warrior.**
- Multilateral Collaboration:** Indian Ocean Rim Association (IORA) (India - Member, UK - Dialogue Partner).
 - Indian Ocean Naval Symposium (IONS) (Both the UK and India are members).
 - Indo-Pacific Oceans Initiative (IPOI) (India and the UK co-lead the Maritime Security pillar).
 - The UK supports India's bid for a permanent seat in the UN Security Council (UNSC).
 - India and the UK cooperate within the G20 on global trade, economic stability, and climate change.
- People-to-people ties:** Rise of Indian-origin politicians.
 - The Indian diaspora is considered a "model minority", excelling in multiple fields.
 - British Indian Community:** Over 1.6 million (2.5% of UK's population).

Issues and Concerns

- **Sovereignty & Anti-India Activities:** India's persistent security concerns surrounding Pro-Khalistan extremist activity and radicalised networks in the UK, and calls for more diplomatic and law enforcement action.
- **Delays in Extradition** – Increasing legal delays in the extradition of economic criminals and fugitives wanted by the Indian authorities to the U.K.
- **Domestic Political Friction over Mobility:** UK Political Debates on Social Security Exemptions (NICs) and Broader Immigration Quotas for Temporary Indian Workers.
- **Geopolitical Differences:** Divergent strategic perspectives on Eastern European conflicts and specific regional sanctions regimes, necessitating careful diplomatic navigation.

Way Ahead

- India-U.K. ties are moving from a historically linked connection to a stronger economic, technological and strategic relationship.
- India and the U.K. should prioritise joint **R&D, co-development and co-production** over conventional buyer-seller arrangements.
- Bilateral cooperation should focus on emerging technologies such as **artificial intelligence, autonomous systems, drones, cyber security, space and advanced propulsion**.
- Both countries should strengthen **maritime-domain awareness, information sharing and capacity-building** in the Indo-Pacific.

Source: TH

INDIA'S CIVIL NUCLEAR POWER SECTOR

Context

India is looking to bring five additional nuclear reactors online in this decade and to increase its nuclear capacity to 100 GW by 2047.

Status of Nuclear Power in India

- **Installed Capacity:** India has 25 active nuclear reactors with a total capacity of 8.7 gigawatt-electric (GWe). Nuclear power reactors in the country generated 56,681 million units of energy in 2024-25.

- **Consistent Contribution:** Nuclear power has always contributed about 3% of India's overall electricity production.
- **Planned Expansion:** Nuclear capacity of India to increase around 3x in next few years.
 - ♦ Through international cooperation, indigenous 700 Megawatt (MW) reactors and 1,000 MW reactors are under development, and the installed capacity is expected to touch 22.38 GW by 2031-32.
- **International Cooperation:** India has signed Inter-Governmental Agreements (IGAs) on Civil Nuclear Cooperation for peaceful purposes with 18 countries, indicating the rising worldwide confidence in India's nuclear program.
- **Reactors Under Construction:** 10 reactors with around 8 GWe of capacity are under construction. Another 10 units with some 6.6 GWe of capacity are in the pre-project stage.

India's Three-stage nuclear programme

- **Establishment:** India's nuclear journey began shortly after Independence with the establishment of the **Atomic Energy Commission in 1948**.
 - ♦ In 1956, Asia's first research reactor, **Apsara**, was commissioned at the Bhabha Atomic Research Centre (BARC) in Trombay.
 - ♦ India was the **second Asian nation** to build a nuclear power plant in **1969** at Tarapur, just after Japan.
- India has a three-phase programme of nuclear power envisioned by **Dr Homi J Bhabha**, the father of India's nuclear programme.
- **First Stage (Pressurised Heavy Water Reactors - PHWRs)** :The first stage of the Indian nuclear program was the building of a fleet of PHWRs.
 - ♦ The fissile material for these reactors is natural uranium (U-238) with small amounts of U-235.
 - ♦ Deuterium oxide (heavy water) as moderator and coolant.
 - ♦ The primary goal in this stage was to generate plutonium-239 as a by-product of uranium fuel.
 - ♦ Plutonium-239 is a fissile material used as fuel in nuclear reactors.
- **Second Stage (Fast Breeder Reactors – FBRs)** : The second stage of the program is the use of Fast Breeder Reactors (FBRs).
 - ♦ FBRs are designed to work in a fast neutron spectrum and produce more fissile material than they consume.

- ♦ In this step the plutonium-239 from the first stage and U-238 are used as fuel to make energy and more Pu-239 and U-233.
- ♦ Uranium-233 is another fissile material that can be used as fuel in nuclear reactors.
- **Third Stage Advanced Heavy Water Reactors (AHWRs):** The program is expected to end with the deployment of Advanced Heavy Water Reactors (AHWRs).
 - ♦ The reactors will use thorium-232 (Th-232) as fuel, which will be used to produce U-233 and electricity. Pu-239 will be used.
 - ♦ India has lots of thorium. The goal of this stage is to tap the potential of thorium as nuclear fuel.

Challenges

- **Challenges limited domestic experience:** India's nuclear program has been primarily based on Pressurised heavy-water reactor (PHWRs) and fast breeder reactors, limiting our domestic experience in Light Water Reactor (LWR) design and operation.

Light Water Reactors

- **Light Water Reactors** form a mainstay of the **global nuclear program** currently account for over **85% of the civil nuclear reactor capacity in the world**.
 - ♦ They use **ordinary (light) water as both a coolant and a neutron moderator**.
- **LWRs** entail **simpler design and engineering** compared to heavy water reactors given that they use normal water as **both coolant and moderator**.
- **Low Cost:** It usually involves lower construction costs due to economies of scale and they are considered **more thermally efficient**.
- **Limited domestic uranium :** India has its own stocks of low-grade uranium. It also imports uranium.
 - ♦ The long-term growth of nuclear power depends on arrangements for fuel supplies with other countries.
- **High capital cost:** Nuclear power facilities demand huge capital and long construction period.
- **Technology Challenges::** India is developing breakthrough technologies such as SMRs at an early stage.

- **Public safety and concerns.** Local opposition and delays in project completion are possible due to nuclear accidents.
- **Thorium gap:** Though India has large thorium reserves, commercial technology is still under development.

Government Initiatives

- **Nuclear Energy Mission & Capacity Targets:** The Government has launched a Nuclear Energy Mission aimed at expanding nuclear power capacity to about 100 GW by 2047.
 - ♦ This mission emphasises enhancing domestic capabilities and adopting advanced technologies.
- **Indigenous Reactor Development:** Such as Bharat Small Reactors are under development to support scalable deployment.
 - ♦ While these are PHWR and SMR variants, they lay the groundwork for a broader nuclear innovation ecosystem.
- **Three-Stage Nuclear Power Programme:** India has a long-term strategy to utilise India's thorium reserves through PHWRs, Fast Breeder Reactors and thorium-based reactors.
- **SHANTI Act, 2025:** It enables capacity expansion, advanced reactor technologies and wider participation in nuclear power generation.
- **Research & Development Funding:** The Union Budget 2025-26 allocated significant funding (around ₹20,000 crores) for R&D in advanced nuclear technologies.
- **International Cooperation & Tech Access:** The government is working on international partnerships and technology transfer mechanisms that can help bridge experience gaps in technologies.

Way Ahead

- India is pursuing an **indigenous small reactor programme**, with three types of SMR, developed by the **Bhabha Atomic Research Centre for demonstration**.
 - ♦ These are the **200 MWe Bharat Small Modular Reactor (BSMR-200)**, a **55 MWe small modular reactor (SMR)**, and a **5 MWt high-temperature gas-cooled reactor** for hydrogen production.
 - ♦ The government has set a target of having **at least five indigenously designed and operational SMRs by 2033**.

- **Repurpose Old Thermal Power Sites:** The government is conducting studies to repurpose old thermal power plant sites for nuclear sites.
 - ♦ Such repurposed sites may **ultimately be more suitable for SMRs and smaller-capacity nuclear projects** rather than large conventional reactors.
- The **indigenously designed and built Prototype Fast Breeder Reactor (PFBR)** at Kalpakkam in Tamil Nadu successfully attained **its first criticality** in April 2026, marking the **initiation of a sustained nuclear chain reaction**.
 - ♦ With this achievement, India entered the **second stage of its three-stage nuclear power programme**.
 - ♦ Once fully operational, **India will become only the second country** in the world after Russia to operate a commercial fast breeder reactor.
- **Security Cooperation:** Established a Strategic Dialogue mechanism in 2006 to cover regional and global issues of mutual concern.
 - ♦ The two countries have an Extradition Treaty, Mutual Legal Assistance Treaty in Criminal Matters and an Agreement of Transfer of Sentenced Persons in place.
- **Space Cooperation:** Both signed a framework agreement for peaceful use of outer space in 2004 as well as an Agreement for inter-institutional cooperation between the space agencies.
 - ♦ Both countries have been collaborating in Data sharing and satellite tracking of Indian satellites.
- **Multiflora Relations:** India and Brazil share a very close and multifaceted relationship both at bilateral level as well as in plurilateral fora such as BRICS, BASIC, G-20, G-4, India, Brazil, and South Africa (IBSA) Dialogue Forum, International Solar Alliance, as well as in the larger multilateral bodies such as the UN, WTO, UNESCO, and WIPO.

Source: IE

INDIA-BRAZIL RELATIONS

Context

- India and Brazil reaffirmed their commitment to **deepening bilateral cooperation in telecommunications and Information and Communication Technologies (ICTs)**.

Brief on India- Brazil Relations

- **Diplomatic Relations:** Relations were established in **1948**, and the two countries have been **Strategic Partners since 2006**.
 - ♦ Both sides also have several **Joint Working Groups** to take forward sectoral cooperation.
- **Trade Relations:** Brazil is currently **India's largest trade partner** in South America.
 - ♦ Two-way trade was **worth \$12.2 billion in 2024-25**, with Indian exports amounting to **\$6.77 billion**.
 - ♦ Both Nations have established **Trade Monitoring Mechanism** as an institutional mechanism to monitor and identify bottlenecks in bilateral trade and take appropriate measures to address them.
- **Defence & Security Cooperation:** India and Brazil signed an agreement in 2003 for cooperation in defence. Meetings of the Joint Defence Committee (JDC) are held as an institutionalized mechanism for defence cooperation.
- **Relevance of India-Brazil Cooperation in a Changing World**
 - **UNSC Reform:** India and Brazil advocate expansion in both permanent and non-permanent categories, reflecting the aspirations of underrepresented regions.
 - **Global South Voice:** Both champion reforms in international institutions (UN, IMF, World Bank) to reflect contemporary realities and the needs of developing countries.
 - **Bioenergy and Global Biofuels Alliance:** India and Brazil, as founding members, have scalable biofuel alternatives to mitigate climate change.
 - **TFFF (Tropical Forests Forever Fund) COP30:** India backs Brazil's climate leadership at COP30, emphasises forest conservation, climate financing
 - **Bilateral Investment and Trade Mechanism:** In line with the growing global trade dynamics, addressing trade barriers, simplifying visa procedures and encouraging local currency funding are important.
 - **Pharma and Health Security:** Joint R&D in vaccines and tropical diseases contributes to the enhancement of health sovereignty in the Global South.

- **Food Security:** India & Brazil, significant food producers, jointly urge for ending hunger by 2030 through multilateral efforts like Global Alliance Against Hunger and Poverty, highlighting the Global Leadership on Food Security.
- **Joint STI Innovation:** Collaborative R&D in AI, quantum tech and renewables fosters technological self-reliance and inclusive innovation

Challenges in the Relations

- **Geopolitical competition :** Both India and Brazil are emerging countries, seeking a greater position on the global stage.
 - ♦ And sometimes it can create competitiveness, particularly in international bodies like as the UN, where both countries strive to increase their participation and influence.
- **Trade Barriers:** India and Brazil have huge trade potential but have not been able to attain its full potential due to many trade barriers and protectionist moves in both the countries.
 - ♦ Such prohibitions are a hindrance to the development of bilateral trade and investment.
- **Infrastructure and connectivity:** There is still scope for developing infrastructure and connectivity between the two countries.
 - ♦ Better air and maritime connectivity and transit linkages are needed to promote business and people-to-people contacts.
- **Regional Priorities and Strategic Autonomy:** Brazil's priorities include integration in Latin America and alliances in the Western Hemisphere.
 - ♦ Regional strategic objectives are less congruent, with India's focus being on its near neighbourhood and Indo-Pacific.
- **Geopolitical Pressures & External Influences:** Brazil is closely associated with Western countries (EU, USA) but India has an Indo-Pacific orientation resulting to several global alignments.
 - ♦ Both feel the need to align to bigger blocs, which also influences bilateral prioritising.

Way Ahead

- India–Brazil relations carry vast untapped potential, but current challenges, ranging from trade and connectivity to strategic divergence must be addressed through sustained dialogue, institutional mechanisms, and political will.

- Deeper engagement, better follow-up of agreements, and enhanced people-to-people contact will help realize the full promise of this South–South partnership in a changing global order.

Source: PIB

RISING SUGAR PRICES AMID ETHANOL BLENDING POLICY

Context

- The diversion of sugarcane and foodgrains towards ethanol production has raised concerns over rising sugar and food prices, highlighting the trade-off between energy security and food security under India's ethanol-blending programme.

What is Ethanol?

- Ethanol is **99.9%** pure alcohol that can be blended with petrol. It can be produced from **sugarcane, maize, wheat, etc** which are having high starch content.
- Alcohol production involves **fermentation of sugar** using yeast. In cane juice or molasses, sugar is present in the form of **sucrose** that is **broken down into glucose and fructose**.

Ethanol Blending Programme

- Ethanol blending refers to the **practice of mixing ethanol with gasoline** to create a fuel mixture that can be used in internal combustion engines.
- The '**National Policy on Biofuels**' notified by the government in 2018 envisaged an indicative target of 20% ethanol blending in petrol by 2030.
 - ♦ **In 2014 only 1.5 per cent** ethanol was blended in petrol in India.
- Given the encouraging performance and various interventions made by the government **the 20% target was achieved in 2025**.
 - ♦ The programme has reportedly saved approximately **₹1.13 lakh crore in foreign exchange** and reduced nearly **544 lakh metric tonnes of CO₂** emissions cumulatively.
- In June 2026, the government introduced **E85 for flex-fuel vehicles**; E100 is expected to be offered in the near future too.

Why is India Promoting Higher Ethanol Blends?

- **Improving energy security:** India imports almost 88.5% of its entire crude oil requirement.
 - ♦ Increasing the mixing of ethanol reduces reliance on imported oil and boosts energy resiliency.
 - ♦ It will also help to check outflow of foreign exchange and improve macro-economic stability.
- **Farmers help:** Production of ethanol provides alternative market for sugarcane, maize and surplus food grains and hence, provides economic help to farmers notably in areas like Uttar Pradesh and Maharashtra.
- **Environmental Benefits :** Ethanol is a renewable fuel and it creates fewer toxins than petrol. By combining higher we may reduce pollutants and make transit cleaner.
- **Rural Industrialisation:** The expansion of distilleries has contributed to the development of rural infrastructure and the generation of non-farm employment.
- **India's Global Biofuel Leadership:** India is a founding member of the Global Biofuel Alliance launched at the G20 Summit.
 - ♦ This program consolidates India's status as a global leader in sustainable biofuels further.

Concerns Regarding Ethanol Blending

- **Feedstock Volatility:** Sugarcane production remains heavily monsoon dependent. Ethanol supply and blending targets are disrupted in drought years.
- **Effect on food prices:** Increased diversion of agricultural production results in increased costs of sugar and other food products.
- **Mileage :** Ethanol has less energy per litre than gasoline. Customers raised issues regarding the decline in mileage from E10 to E20 transition.
- **Vehicle Compatibility Problems :** Ethanol is extremely hygroscopic i.e. it readily absorbs moisture from the atmosphere.
 - ♦ Higher ethanol blends can damage engine components, fuel lines, rubber seals and metal parts in cars that are not meant to use such fuel.

Government Response

- The government has approved duty-free import of 10 lakh tonnes of raw sugar under a Tariff Rate Quota (TRQ) till 31 October to boost local availability and check prices as domestic sugar prices are rising.
- All these techniques point to the need for flexible policy coordination between ethanol purchases, sugar production, imports and food-price management.

Way Ahead

- **Second-generation ethanol shift** to agricultural waste, crop waste and other non-food feedstock, to avoid competing with food crops.
- **Policy flexibility::** Ethanol blending targets should be flexible to food costs, availability of sugar, supply of feedstock, and environmental sustainability.
- **Increase water use efficiency:** Promote water-efficient sugarcane production by micro-irrigation and improved cropping practices, particularly in water-stressed regions.

Source: TH

NEWS IN SHORT

PRADHAN MANTRI ANNADATA AAY SANRAKSHAN ABHIYAN (PM-AASHA)

In News

PM-AASHA has emerged as a strong and structured mechanism to support farmers through assured procurement, price stabilization, and effective market interventions.

Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA)

- It was launched in September 2018 and brings together multiple price-support mechanisms covering different crops and market situations.
- It is a framework through which the government seeks to ensure that farmers receive better prices for their produce.
- It seeks to protect farmers from distress sales while also maintaining price stability for consumers.

Components

- It combines four key components — the Price Support Scheme (PSS), Price Stabilization Fund (PSF), Price Deficiency Payment Scheme (PDPS) and Market Intervention Scheme (MIS).



- Price Support Scheme (PSS)** provides for procurement of pulses, oilseeds and copra at MSP to prevent distress sale when market prices collapse. From 2024-25, Tur, Urad and Masur can be procured up to 100% of the State production.
- The Price Stabilisation Fund (PSF)** keeps buffer stocks of essential commodities including pulses, onions and potatoes to keep the prices stable.
- The Price Deficiency Payment Scheme (PDPS)** is the scheme in which the difference between MSP and market prices is paid to farmers, mostly for oilseeds, without physical purchase.
- The MIS (market intervention scheme)** is aimed at helping farmers of perishables like tomatoes, onions, and potatoes in case of a price crash or oversupply in the market.

Objectives

- It is designed to provide farmers with greater price assurance and reduce distress sales
- It strengthens agricultural markets while balancing the need for consumer price stability.
- It aims to strengthen the link between MSP and actual price realisation by farmers.
- It seeks to address different situations that can affect farm incomes.

Source: DD

ERRIER CYBER QUEST 2026

In News

The Territorial Army, in collaboration with CyberPeace, has launched Terrier Cyber Quest 2026 (TCQ 3.0).

Terrier Cyber Quest

- It is a national-level hackathon aimed at developing innovative solutions to contemporary defence, cybersecurity and information-domain challenges.
- It seeks to bring together technical talent from academia, industry, research institutions, government organisations and the Armed Forces.
- It will focus on emerging areas including Artificial Intelligence (AI), cybersecurity, threat mitigation and digital awareness, while encouraging development of indigenous solutions relevant to national security.

Latest Developments

- TCQ 3.0 will be conducted across three competition tracks:
 - Bug Hunting:** A cybersecurity challenge commencing with an online Capture-the-Flag (CTF) qualifier and culminating in an in-person live sandbox finale.
 - Participants will be required to identify and document vulnerabilities in simulated critical infrastructure environments.
 - AI Kavach:** An AI and machine-learning based challenge aimed at developing solutions for predictive threat intelligence, automated defence mechanisms and anomaly detection.
 - Creators Challenge:** A digital media and storytelling competition for content creators, communicators and influencers to develop impactful awareness campaigns addressing threats such as deepfakes, phishing, online scams and misinformation.

Source: PIB

RISING CASES OF SWINE FLU

In News

Delhi has registered 1,777 confirmed cases of swine flu, with hospitals reporting a spurt in illnesses in all age groups over the past two weeks.

Swine influenza

- Swine influenza is a respiratory disease of pigs caused by type A influenza viruses that regularly cause outbreaks of influenza in pigs.
- The most common subtypes are H1N1, H1N2 and H3N2.

- It was responsible for a pandemic in the year 2009, and since then, H1N1, H3N2, and some Influenza B strains have been the predominant strains circulating worldwide.
- Transmission in Humans:** It is contagious and can spread from person to person, but the ease with which it spreads can vary.
 - It spreads mostly via coughing and sneezing. It can also spread when you touch a contaminated surface and then touch your mouth or nose with your hand.
 - Swine influenza is common in North and South America, Europe, and parts of Asia. It has been reported in Africa too.

SWINE FLU (H1N1): SYMPTOMS & WHAT TO WATCH OUT FOR

H1N1 is a viral infection of the nose, throat and lungs. It can range from mild illness to a severe condition.

In most cases, 95% recover in 3–5 days.
Cough may last a little longer.

COMMON SYMPTOMS	WHERE DOES IT AFFECT?	WHEN CAN IT BECOME SERIOUS?
- Fever - Loss of appetite - Loss of sense of taste and smell - Fatigue - Headache - Weakness - Chills - Body aches - Cough - Nausea	The virus usually begins in the upper respiratory tract.	In some cases, the virus can spread to the lungs and cause severe complications. Infection and inflammation of the air sacs in the lungs. They fill up with fluid. Sudden fall in oxygen saturation. Patient may need hospitalisation for stabilisation. Only about 5% of cases become serious. Risk is higher in people with underlying health conditions (comorbidities).

RISK OF SECONDARY INFECTION
The virus can weaken your immunity, making it easier for bacteria to infect the lungs and cause pneumonia.

KEY TAKEAWAY: Most people recover with rest and care, but early attention is crucial if symptoms worsen.

Seek medical help immediately if you have breathing difficulty, persistent high fever, or feel unusually weak.

Preventions and Treatment

- Treatment is mostly supportive. This is a viral infection; thus, antibiotics will not work.
 - If you take the antiviral drug oseltamivir early, it will reduce the severity of the sickness; thus, it is crucial to seek medical attention and get tested in a timely manner.
- Fever can be managed with paracetamol. India has a quadrivalent influenza vaccine, and

annual immunisation is suggested, especially for individuals 60+ and immunocompromised, as flu strains change often and vaccines are updated accordingly.

PRECAUTIONS TO PREVENT SWINE FLU

Simple steps. Strong protection.

1. VACCINATION Get the seasonal influenza vaccine, the most effective way to prevent infection.	2. HAND HYGIENE Wash hands frequently with soap or use hand sanitizer to reduce virus spread.
3. AVOID CROWDED PLACES Limit time in densely populated indoor settings during peak flu activity.	4. MASK USE Wear masks in crowded or enclosed environments to block infectious droplets.
5. RESPIRATORY ETIQUETTE Cover your mouth and nose with a tissue or elbow when coughing or sneezing.	

ADDITIONAL PRECAUTIONS

AVOID EATING OUT Avoid eating out during flu season.	AVOID COLD BEVERAGES & ICE CREAMS Avoid cold beverages and ice creams.	REST, DIET & SLEEP WELL Take adequate rest, eat well and sleep sufficiently.
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STAY HYDRATED

Drink plenty of fluids to help loosen secretions and bring up phlegm.

QUARANTINE YOURSELF

- You could infect other members of the family.
- Stay home for 5 days so the virus becomes non-contagious.
- Before resuming your regular hours at the office, make sure you are up and about in your home environment.
- If moving around and doing light activities don't stress you out, you can venture out.

Small steps today, a healthier tomorrow. Stay safe. Stay healthy.

Source: IE

MOBILE PHONE MANUFACTURING SCHEME

Context

- The Ministry of Electronics and Information Technology (MeitY) has notified the Mobile Phone Manufacturing Scheme (MPMS), with a budgetary outlay of Rs 62,500 crore.

About Mobile Phone Manufacturing Scheme (MPMS)

- The scheme seeks to expand **manufacturing scale, strengthen domestic supply chains and support Indian mobile phone brands** in developing indigenous technology, intellectual property and design capabilities.

Salient Features of MPMS

- The Scheme has two Target Segments;**
 - Target Segment 1 (TS1):** It incentivises mobile phone manufacturing and provides a differentiated incentive ranging from 2.25% to 5%.

- ♦ **Target Segment 2 (TS2):** It supports Indian mobile phone brands and provides an incentive @5% for Indian Brands and an additional incentive of 3% for Indian design and R&D.
 - Moreover, the Scheme provides non-fiscal support to Indian Brands.
- Applicants under TS2 may be granted a gestation period of 1 year.
- **Tenure:** The scheme tenure shall be **5 years**, i.e., from **FY 2026-27 to FY 2030-31**.
- **Additional incentive:** Further, an **additional incentive of up to 1.5%** shall be provided for domestic sourcing of key components/sub-assemblies for both the target segments under the Scheme.
 - ♦ Applicants under the Scheme shall be mobile phone manufacturers, including Electronics Manufacturing Services (EMS) providers, that are registered in India.

Eligibility criteria

- Under TS1, mobile phone manufacturers, including EMS companies registered in India, must have recorded a **minimum turnover of ₹10,000 crore in FY 2025-26**.
 - ♦ **Existing brands** must achieve annual sales of **at least ₹5,000 crore** over and above their FY 2025-26 sales threshold.
 - ♦ A new brand will become eligible after achieving annual sales of ₹10,000 crore in India and must thereafter meet the year-on-year threshold of ₹5,000 crore.
- **Under TS2**, applicants must have a minimum turnover of **₹1,000 crore in FY 2025-26** and meet the criteria prescribed for an Indian brand.

Expected outcomes

- During the scheme's tenure, cumulative mobile phone production in India is expected to reach approximately **₹39 lakh crore**.
- The MPMS is expected to generate around **60,000 direct jobs**, consolidating India's position as a global electronics manufacturing hub.

Electronics manufacturing growth

- **India** is currently the **world's second-largest mobile phone manufacturer** by volume, with **99.2 per cent** of mobile phones used in the country being manufactured domestically.
- **The Production Linked Incentive Scheme for Large Scale Electronics Manufacturing (PLI-LSEM)** played a key role in establishing India as a global hub for mobile phone manufacturing and exports. The scheme's tenure ended on March 31, 2026.

Source: **PIB, DD News**

PROGRESS OF VB-G RAM G AND ITS COMPARISON WITH MGNREGA

CONTEXT

- The Supreme Court praised the repealed Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), calling it a salutary scheme and examining whether the right to work can be elevated to the status of a fundamental right under **Article 21**.

About VB-G RAM G

- It replaced the **Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (MGNREGA)**.
 - ♦ The move marked a shift from a **"demand-driven framework"** to a **"supply-driven scheme."**
- **Enhanced Livelihood Guarantee:** It will enhance the statutory wage employment guarantee to **125 from 100 days per rural household in every financial year** for adults who volunteer to undertake **unskilled manual work**.
- **Centrally Sponsored Scheme:** The scheme will be implemented as a Centrally Sponsored Scheme with a sharing pattern of **90:10 for North-Eastern and Himalayan States/UT and 60:40 for all other States**.
- **Securing peak agricultural seasons:** States will be empowered to notify in advance, a period aggregating to 60 days in a financial year covering peak sowing and harvesting during which works under the Act will not be undertaken, **facilitating sufficient farm labour at critical times**.

- **Normative Allocation to States based:** States will ensure transparent and need-based intra-State distribution of funds across Districts and Gram Panchayats, taking into account the category of the Panchayats and local developmental needs.
- **Unemployment allowance:** If eligible applicants are not provided work within the stipulated period, **State Governments will be obliged** to pay **unemployment allowance**.
- **VGPP based planning:** Planning will be undertaken through Viksit Gram Panchayat Plans, prepared by Gram Panchayats and integrated with national spatial planning systems.
- **Institutional Oversight:** The Central Gramin Rozgar Guarantee Council and the State Gramin Rozgar Guarantee Councils shall be constituted for review, monitoring and effective implementation of the provisions of the legislation in their respective areas.

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

- The Mahatma Gandhi National Rural Employment guarantee Act (MGNREGA), 2005 legally assures pay employment to rural households.
- It was created in 2006 and renamed as MGNREGA in 2009.
- The main objective is to promote the livelihood stability of the rural people by providing at least 100 days of assured wage employment in a financial year to all households in rural areas whose adult members volunteer to do unskilled manual work.
- Implementation: It is a demand driven and rights based program implemented through Gram Panchayats primarily.
- Allowances: Unemployment allowance if work is delayed more than 15 days and not less than one-third (33%) of participants are women.

Concerns with the New Framework

- **Demand-driven to allocation approach:** Increased central control can undermine the rights-based nature of rural employment.
- **Increased cost on states:** Most states would have to contribute 40% of the expenditure compared to the far higher participation of the Union under MGNREGA.

- **Employment creation:** Despite an increase of guaranteed days of work, employment creation under the VB-G RAM G Act has declined by 50%.

Right to Work as a Fundamental Right

- The Constitution does not make the right to work a fundamental right.
- **Article 41 under Part IV of the Constitution** directs the state to secure the right to work, education, and public assistance in cases of unemployment, old age, sickness, disablement, or other undeserved want, based on its economic capacity and development.
 - ♦ It is part of the **Directive Principles of State Policy (DPSPs)** and therefore is not directly enforceable by courts.
- However, it is being argued that employment is **essential for a dignified life**, which forms part of the broader interpretation of **Article 21**.

Source: TH

GST APPELLATE TRIBUNAL (GSTAT)

Context

- Less-than-anticipated cases were filed with the **GST Appellate Tribunal (GSTAT)**.

About GSTAT

- It is a statutory quasi-judicial body established under the **Central Goods and Services Tax (CGST) Act, 2017**.
 - ♦ The **GSTAT e-filing portal** was made operational in **2025**, and the deadline for filing appeals, which were time-barred, was July 31, 2026.
- The GSTAT is the **second appellate authority** and provides a **unified platform for resolving conflicts** between **taxpayers and tax authorities**, while the first **appellate authority is a Commissioner (Appeals) level officer** whom a taxpayer can approach to appeal against an order or decision issued by a junior officer.
- The **GSTAT** had introduced a **token system** after consultations with the **Department of Revenue and Ministry of Finance**.
 - ♦ It had allowed businesses whose cases were getting **time-barred on July 31** to generate tokens on the e-filing portal.

- Once the **token was generated**, businesses had 60 days to file the case before the appellate tribunal.

Source: IE

ELIGIBILITY CRITERIA FOR ENTRY-LEVEL JUDICIAL SERVICE

Context

- The Supreme Court retained its **2025 decision** requiring **prior professional exposure before entry into the subordinate judiciary** but significantly **altered how that requirement would operate**.

Background

- The Shetty Commission had recommended the abolition of the three-year practice requirement in 2002.
 - The Commission claimed that law students are already exposed to courts through internships and clinical training and that three years of compulsory practice are thus not required.
 - The Supreme Court recognised this argument and fresh law graduates were made eligible to participate in the judicial recruitment process immediately after their graduation.
- In May 2025, the Supreme Court revived the condition that candidates for Civil Judge (Junior Division) examination need to have three years of experience at the Bar before they are eligible to take the examination.

Latest Developments

- The Supreme Court continues to hold that **fresh law graduates should not enter the subordinate judiciary** without prior exposure to the functioning of courts.
- Rational Behind it:** The underlying rationale is that **Civil Judges deal with life, liberty, property and personal rights** from the beginning of their careers.
- Candidates must have **three years of relevant experience** before appearing for the **judicial service exam**.
 - This period would be counted from the **date they enrol with the State Bar Council**.

New Framework Prescribed by SC

- From April 2027 onwards**, candidates must have **at least one year of actual practice before appearing for examination**, certified under a mechanism that is **prescribed by the High Courts**.
 - Even then, the **successful candidates must complete the same one-year academy training and one-year clerkship programme** before taking up regular judicial duties.
- The court also **rejected counting postgraduate education** towards the requirement, saying that academic study cannot substitute for familiarity with the functioning of courts.
- It directed that the new framework **will operate for five years** after which its effectiveness will be reviewed.

Source: IE

HERITAGE VILLAGE

In News

- The Odisha government has announced that **Gurujang village** near Talcher in Angul district, the birthplace of Swami Laxmanananda Saraswati, will be developed as a heritage village.

More about the News

- Swami Laxmanananda Saraswati, the Vishwa Hindu Parishad leader, was killed by left-wing extremists in 2008 after being accused of promoting religious hatred.

What are heritage villages and how do they differ from our normal villages?

- A **heritage village** is a traditional settlement developed or conserved to preserve and showcase its unique cultural heritage, traditions, architecture and way of life.
- Unlike conventional villages, where development and modernisation naturally alter the settlement over time, heritage villages place greater emphasis on **conservation of cultural identity**.
- These villages promote **cultural tourism** by allowing visitors to experience the traditional lifestyle, architecture, crafts, festivals and practices of the local community.

- Heritage conservation can cover both:
 - ♦ **Tangible heritage:** traditional houses, architecture, monuments and artefacts.
 - ♦ **Intangible heritage:** customs, festivals, folklore, crafts, music and traditional knowledge.
- **Examples:** Pragpur (Himachal Pradesh) is widely recognised as India's first heritage village.
 - ♦ Other examples include **Kisama (Nagaland), Reiek (Mizoram), and Khasi Heritage Village (Meghalaya).**

Source: TH

POLYSILICON

Context

- The Indian government is planning a support scheme for polysilicon manufacturing, targeting 30 GW of domestic capacity by 2030, with an investment of over ₹25,000 crore to strengthen the domestic solar value chain.

About Polysilicon

- Polysilicon, also known as polycrystalline silicon or simply poly-Si is a highly purified form of silicon and the base raw material used in solar PV manufacturing.
- It is an **upstream and highly electricity-intensive** stage of the conventional solar manufacturing chain.
- It is converted into **ingots**, which are sliced into **wafers**. Wafers are then processed into **solar cells**, which are assembled into **solar modules**.
- **China dominates global polysilicon production**, accounting for around **94% of global production**, followed by **Germany and the US**.
 - ♦ India currently lacks significant commercial-scale polysilicon production capacity and relies heavily on **imports** for this crucial upstream input.

Source: TH

