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VB-G RAM G ACT COME INTO FORCE

In News

- The Viksit Bharat-Guarantee for Rozgar and Aajeevika Mission (Gramin) (VB-G RAM G) Act, 2025, has come into effect from 1st July.

Background of VB-G RAM G

- In the past, India launched a number of rural wage employment programmes to alleviate poverty, to increase agricultural productivity and to provide jobs to underemployed rural workers.
- Among the early programmes were the **Rural Manpower Programme (1960s)** and the **Crash Scheme for Rural Employment (1971)**.
 - This resulted in the introduction of more structured programmes in 1980s and 1990s such as **National Rural Employment Programme, Rural Landless Employment Guarantee Programme, Jawahar Rozgar Yojana (1993)** and Sampoorna Grameen Rozgar Yojana (1999) to improve coordination and coverage.
- The **Maharashtra Employment Guarantee Act (1977)** was a major turning point which introduced the concept of a legal right to work.
- These developments led to the national legislation of the MGNREGA (2005) which provides a statutory basis for rural employment generation in India.
- Recently, India has replaced the **MGNREGA, 2005 with the VB-G RAM G Act, 2025** (Viksit Bharat - Guarantee for Rozgar and Aajeevika Mission) to modernise rural employment policy in line with **Viksit Bharat @2047**.

VB-G RAM G Act, 2025

- It was Passed by Parliament in December 2025 and replaces the two-decade-old Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), 2005.
- It shifts the focus from a standalone welfare intervention to an integrated instrument of development and resilient infrastructure.



Key features of VB-G RAM G

- Increased guaranteed wage employment days:** The VB-G RAM G Act increases the number of working days from 100 to 125.
- Pause in employment guarantee during agriculture season:** VB-G RAM G provides for a 60-day pause in the scheme during the peak agricultural sowing and harvesting seasons to ensure the availability of farm labour.
- States to share funding burden:** Departing from MGNREGA, the VB-G RAM G Act proposes a higher share of states in the funding of the rural job programme.
 - Unlike MGNREGS, where the Centre paid 100% of the wage bill, VB-G RAM G shifts 40% of the funding burden onto states.
 - The exceptions to this are the northeastern and Himalayan states as well as Union Territories (UTs) with a legislature, where the Union government will bear 90% of the funding burden. As for UTs without a legislature, the Centre will bear the complete funding burden.
- Top-down resource allocation approach:** It also flips the MGNREGS model of Central allocations based on state labour budgets, with the Centre now determining the devolutions.
- New rules:** The Ministry of Rural Development has issued eight draft rules under the VB-G RAM G scheme covering governance, grievance redressal, administrative expenses, transition provisions, fund allocation norms, wage and unemployment allowance payments, a central monitoring council, and expenditure procedures for states and UTs, aimed at ensuring smooth and transparent implementation.



- **Gramin Rozgar Guarantee Card to replace job cards:** The Act of VB-G RAM G maintains continuity to the existing MGNREGS workers by keeping their e-KYC verified job cards valid till the time the states issue new Gramin Rozgar Guarantee Cards.
 - ♦ It also provides for giving these cards to rural households willing to do unskilled work, through Gram Panchayats, with special coloured cards for vulnerable groups like women, elderly, disabled persons, bonded labourers, PVTGs and transgender persons. All cards will be good for 3 years, renewable after verification.
- **Prompt Payments & Penalties:** Wages must be paid weekly or within 15 days from closure of muster rolls and delays incur a daily compensation rate of 0.05% of unpaid wages.
- **Normative allocation to states :** Under the Draft Objective Parameters for Normative Allocation Rules, 2026, the Union Government will decide annual fund allocations for each state based on specified objective criteria, using the Sixteenth Finance Commission's horizontal devolution formula as the basis for distributing funds among states.
- **New Wage rates for Unskilled Manual Workers:** Under the VB-G RAM G Act, 2025, the Centre is empowered to fix wage rates for unskilled manual work and may set different rates for different regions, ensuring they are not lower than MGNREGA wages.
 - ♦ The Union government has fixed a floor wage of ₹300 per day under the Viksit Bharat-Guarantee for Rozgar and Aajeevika Mission (Gramin) (VB-GRAM G) Act, 2025,
 - ♦ Daily wages have been notified in the range of ₹300–₹409 across states, with up to ₹450 in parts of Sikkim. While northern and northeastern states have seen wage increases of over 15%, southern states like

Karnataka, Tamil Nadu, Andhra Pradesh, and Telangana have recorded relatively lower hikes of up to 3%.

- **Unemployment Allowance:** If employment not provided within 15 days, mandates an allowance at one-fourth of the notified wage for the first 30 days, and one-half thereafter.

Relevance of VB-G RAM G

- It improves **guaranteed employment that reduces seasonal unemployment** and income insecurity.
- It **addresses wage gaps between states** and promotes equitable wages for rural employees.
- It **connects employment to water use and disaster planning**, creating environmental resilience.
- It helps in **participation of women and marginalised communities in rural development works**.
- The emphasis on **building lasting infrastructure enhances long-term rural productivity and development**.
- It Supports broader development goals, including the vision of making India a developed country by 2047.

Criticism and Challenges

- **Centralisation may dilute bottom-up planning** which is the basis of effectiveness of MGNREGA.
- The proposed centralised methodology for classifying Village Panchayats and distribution within the State normative allocations **introduces micromanagement**.
- Under MGNREGA, the Centre bore almost the entire labour cost, while material costs were shared in a 60:40 ratio. Under VB-G RAM G, however, the **combined labour and material expenditure is** now subject to the 60:40 ratio **putting states in financial strain**.
- **Over-reliance on biometric and digital systems** could alienate vulnerable and rural populations with limited access.
- The proposed changes raise concerns about weakening or replacing a successful rights-based employment guarantee framework.

Conclusion and Way Forward

- The VB-G RAM G Act is a major reform in rural employment policy which links livelihood security with sustainable development and extends job guarantee.

- However, its success depends on overcoming the challenges of funding, inclusion and governance through adequate fiscal support, autonomy of Gram Panchayat, inclusive digital systems, stronger social audits, climate resilient planning and capacity building for effective implementation towards Viksit Bharat @2047.

Source :IE

ESARAS: EXPANDING MARKETS, EMPOWERING RURAL WOMEN

Context

- The Government recently emphasized the role of **eSARAS (SARAS Aajeevika)** in digitally empowering **women-led Self-Help Groups (SHGs)** by linking rural artisans to national markets and promoting inclusive growth under the Digital India mission.

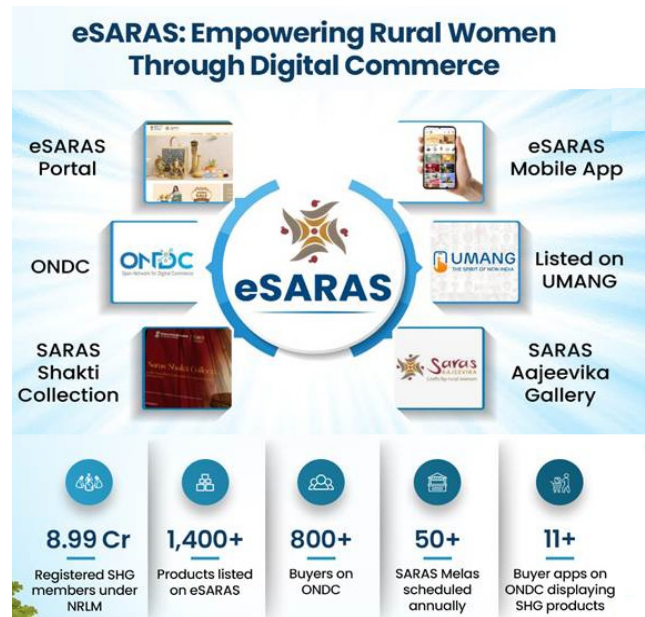
About eSARAS (SARAS Aajeevika)

- It is a digital marketplace for products created by women SHGs, rural artisans and producer collectives across India.
- It is developed by the **Ministry of Rural Development** under the Deendayal Antyodaya Yojana–National Rural Livelihoods Mission (**DAY-NRLM**).
- Its objective is to provide SHG members with direct market access, eliminate middlemen, ensure fair remuneration and promote indigenous crafts and rural entrepreneurship.
- Every product on eSARAS carries a story, and every purchase is a direct connection to the artisan behind it. It includes examples like:
 - ♦ Chanderi sarees from Madhya Pradesh
 - ♦ Marble artisans in Rajasthan
 - ♦ Pashmina producers in the hills of Jammu & Kashmir

Key Milestones: From Portal to e-Commerce Ecosystem

- **eSARAS Portal:** e-Commerce portal launched for better and more effective marketing of Saras products
- **eSARAS Mobile App:** Mobile app launched alongside the eSARAS Fulfilment Centre. It is used for processing, packaging and shipping of products.

ONDC: SHG products made available across more than 11 buyer apps (more than 20 crore buyers on ONDC platform) with more than 800 handcrafted products listed.



- **UMANG:** eSARAS listed on UMANG; platform now serves 2,572 services with 796.69 crore transactions (June 2026)
- **SARAS Shakti Collection:** Premium curated gift collection launched at Rashtriya Gramin Vikas Sammelan 2026 for institutional and corporate markets.
- **SARAS Aajeevika Gallery:** It is a permanent retail gallery established for showcasing curated SHG products.

Key Features of eSARAS

- **Marketplace for SHGs:** It focuses only on the sale of goods produced by SHGs and producer groups run by women.
- **Entrepreneurship amongst Rural Women:** It is an effort at nurturing entrepreneurship skills in rural women.
- **Direct Market Linkages:** It offers direct connections between the producers and customers, and minimizes reliance on middlemen, thereby helping increase the income of producers.
- **Product Diversification:** It has handicrafts, handlooms, natural & organic foods, home décor, textile products, traditional artefacts etc. It helps promote the rich cultural and artisanal tradition of India.
- **Digital Empowerment:** It enables online registration, cataloging, digital payments and order management, and digital literacy and financial inclusion amongst rural women.

- **National Market Access:** It enables rural products to reach the customers throughout the country irrespective of the geographical constraints.
 - It contributes to the 'Vocal for Local' and Atmanirbhar Bharat agenda.
- **Inclusiveness:** It gives livelihood options to the women, especially those belonging to marginalized communities and remote areas.
 - It supports the community institutions formed under DAY-NRLM.

Way Forward

- **Capacity Building:** Continuous training in digital marketing, packaging, branding and quality standards.
- **Logistics Infrastructure:** Need for a well-structured supply chain and delivery system for order fulfillment.
- **Technological Innovations:** AI-based recommendation, multi-language interface, analytics and other such technologies for enhanced user experience.
- **Brand Creation:** Creating region-wise brands and leveraging the GI-based product promotion to strengthen competitiveness.
- **Integration with Other Marketplaces:** Convergence with ONDC, GeM and other major e-commerce platforms to enlarge market access.
- **Financial Assistance:** Providing easy credit, working capital and insurance assistance to SHGs.
- **Export Initiatives:** Explore export options for the premium handicrafts and artisanal products.

Source: PIB

130TH CONSTITUTION AMENDMENT BILL

Context

- The Joint Parliamentary Committee (JPC) examining the **130th Constitution Amendment Bill** is expected to adopt its report soon.

About

- **Background:** The bill was introduced in 2025 and was subsequently referred to a **Joint Parliamentary Committee (JPC)** following intense opposition protests.
- **Major Features:** The Bill provides for the removal of a minister if he/she is accused of an offence **punishable with five or more years**

of imprisonment, and has been **arrested and detained for 30 consecutive days**.

- If the **Prime Minister or a Chief Minister remains in custody for 30 consecutive days**, they must resign; otherwise, they would automatically cease to hold office on the 31st day.
- **The removal can be directed by the President or Governor** upon the advice of the Prime Minister or the Chief Minister, respectively, or automatically on the 31st day of detention.
- **At present**, ministers leave office through **resignation, dismissal by the Prime Minister or Chief Minister, or disqualification** following conviction under existing laws.
 - ♦ The proposed amendment introduces **prolonged custody, rather than conviction, as a ground for vacating public office**.
 - ♦ **The provision is intended to** protect the integrity of public office and ensure that individuals facing serious criminal proceedings do not continue in executive positions for extended periods.
- **Critics have argued that the Bill:**
 - ♦ May violate the presumption of innocence by linking removal from office to arrest rather than conviction.
 - ♦ Could allow misuse of investigative agencies for political purposes.
 - ♦ May raise questions under the Constitution's basic structure doctrine, particularly regarding democracy, federalism, and the rule of law.

Criminalisation of politics

- **Criminalisation of politics** refers to the growing participation of individuals with criminal backgrounds in electoral politics.
- **A serious criminal charge includes** offences where the maximum punishment is five years or more, or those that are non-bailable.
- **In the Lok Sabha**, the share of MPs facing serious criminal cases has more than doubled, from **14% in 2009 to 31% in 2024**.
 - ♦ **In the Assemblies**, the share was **29% in 2024**, which accounts for more than **1,200 MLAs**.

- **Andhra Pradesh** had the highest share of MLAs with serious criminal cases at **56%**, followed by **Telangana (50%)**.

Reasons of Criminalisation of politics

- **Weak Disqualification Laws:** The Representation of the **People Act, 1951 (RPA)** disqualifies candidates only after conviction. Since trials take years, candidates contest multiple elections before any judgment.
- **Money and Muscle Power:** Candidates with financial resources and local influence are seen as “winnable” candidates.
- **Low Voter Awareness:** Affidavits disclose candidate details, but many voters remain unaware or vote on caste/religious lines.
- **Party Complicity:** Parties often justify fielding tainted candidates by citing “popularity” and “electoral chances.”
- **Judicial Delays:** Frequent adjournments and politically motivated withdrawal of cases allow criminals to escape conviction.

Impact of Criminalisation of Politics

- **Erosion of Democratic Values:** It undermines the principle of free and fair elections and voters are left with restricted choices, weakening the spirit of representative democracy.
- **Corruption:** The presence of criminal elements escalates **electoral malpractices** such as voter **intimidation, booth capturing, and the use of black money** in campaigns.
- **Decline of Public Trust:** Repeated election of tainted representatives, lead to **declining voter turnout** and weakening people's faith in democratic institutions.
- **Distortion of Policy-Making:** Elected representatives use political power to protect personal and criminal networks and divert policy-making away from public interest.

Key Committee Recommendations

- **Indrajit Gupta Committee (1998) & 2nd ARC (2007)** recommended partial state funding of elections to curb the use of black money and reduce corruption.
- **The National Commission to Review the Working of the Constitution** in its **2002** report recommended measures to enhance the accountability of political parties, including the statutory audit of party expenses and the disclosure of candidates' assets and liabilities.

- **The Law Commission's 244th Report (2014)** recommended disqualifying politicians from contesting elections as soon as charges are framed against them for offenses that carry a maximum punishment of **five years or more**.
 - ♦ The report specifically recommended **expediting trials for sitting MPs and MLAs** by establishing fast-track courts.

Supreme Court Interventions

- In **Lily Thomas v. Union of India (2013)**, the Court ruled that any sitting MP, MLA, or MLC would be **immediately disqualified** upon conviction for a crime with a sentence of **two years or more**.
- In **Public Interest Foundation v. Union of India (2018)**, the Court directed political parties to publicize the criminal records of candidates, detailing the nature of offences and charges.
- In **2020, the Supreme Court of India** ordered political parties to publish details of candidates with pending criminal cases on their websites, social media, and in newspapers, along with the reasons for their selection, **within 48 hours** of candidate selection.

Conclusion

- Criminalisation of politics undermines democratic governance, weakens the rule of law, and erodes public trust in institutions.
- Addressing it requires a combination of electoral reforms, speedy trials of cases against legislators, greater transparency in political funding, stronger internal democracy within political parties, and informed voter participation.

Source: TH

NEW RULES UNDER TELECOMMUNICATIONS ACT, 2023

Context

- The Union Government has notified three major authorisation rules under the Telecommunications Act, 2023, making the new telecom regulatory framework operational.

About

- The authorisation rules under the Act include rules;
 - ♦ Telecommunications (Authorisation for Provision of Principal Telecommunication Services) Rules, 2026.
 - ♦ Telecommunications (Authorisation for Captive Telecommunication Services) Rules, 2026.

- ♦ Telecommunications (Authorisation for Provision of Miscellaneous Telecommunication Services) Rules, 2026.

Background

- **The Telecommunications Act, 2023** replaces the **Indian Telegraph Act, 1885** and the **Indian Wireless Telegraphy Act, 1933**.
- The Act consolidates India's telecom laws into a single legislation to address technological advancements such as 5G, 6G, satellite communication, Internet of Things (IoT), and internet-based communication services.
- While certain provisions of the Act were notified in **2024**, the notification of the authorisation rules completes its implementation.

Key Features of the Telecommunications Act, 2023

- **Technology-Neutral Definition of Telecommunication:** The Act defines telecommunication broadly as the transmission, emission or reception of messages through wire, radio, optical or other electromagnetic systems.
- **Right of Way:** The Act streamlines procedures for establishing telecom infrastructure on public and private property.
 - ♦ The provision is expected to accelerate broadband expansion and the rollout of next-generation telecom networks.
- **Spectrum Assignment:** Spectrum will ordinarily be assigned through auctions. Administrative allocation of spectrum is permitted for specified public purposes, including national security, defence, disaster management and public broadcasting.
- **Digital Bharat Nidhi:** The Act renames the Universal Service Obligation Fund (USOF) as the Digital Bharat Nidhi (DBN).
 - ♦ The fund will continue to finance telecom infrastructure in rural, remote and commercially unviable areas.
- **Emergency Powers:** The Central Government may temporarily take possession of telecom infrastructure during war, public emergency or in the interest of national security.
 - ♦ The Government may also intercept, monitor or suspend telecommunications in accordance with prescribed procedures.

Telecommunications (Authorisation) Rules, 2026

- The government also notified the **DoT's Telecom eServices Portal** for digital implementation of the

new framework, clarifying that authorisation does not automatically grant spectrum rights.

- **Authorisation-Based Regulatory Framework:** The rules replace the earlier licence-based operational framework with an authorisation system prescribed under the Telecommunications Act, 2023.
- **Satellite & Data Rules:** Companies planning to establish, operate, maintain or expand satellite telecom networks or provide telecom services through satellite networks, will have to obtain separate government approval.
 - ♦ The rules also require authorised entities to obtain government approval before **establishing or expanding telecom infrastructure** in security-sensitive areas.
 - ♦ Telecom operators must store network data, logs and related information within India. Copies of such data cannot be routed, shared or made available outside the country.

What are the Concerns?

- **Broad Definition of Telecommunication:** The technology-neutral definition of telecommunication has raised concerns that it could bring **internet-based communication platforms**, such as messaging and calling applications, within the regulatory ambit if notified by the Government.
- **Privacy Concerns:** The Act empowers the Government to intercept communications and temporarily take possession of telecom infrastructure under specified circumstances.
- **Regulatory Uncertainty for OTT Platforms:** The regulatory treatment of Over-the-Top (OTT) communication services remains uncertain.

Way Ahead

- The Government should ensure that the implementation of the Telecommunications Act, 2023 provides regulatory certainty, safeguards user privacy, and maintains an appropriate balance between national security and digital rights.
- A transparent and technology-neutral regulatory framework should facilitate the smooth transition to the new authorisation regime while promoting universal digital connectivity and investment in next-generation telecommunications.

Source: TH

PM CALLS FOR CITIZEN-CENTRIC REFORMS AND SELF-RELIANCE

Context

- PM Modi in a meeting urged the Secretaries of all Union Ministries and Departments to prioritise three core governance objectives—ease of doing business, ease of living, and Atmanirbhar Bharat (self-reliance).

What is Ease of Doing Business

- Ease of Doing Business (EoDB) refers to the extent to which the regulatory, administrative and institutional environment enables businesses to start, operate, expand and close with minimum cost, time and procedural hurdles.

India's Progress in Ease of Doing Business

- India improved its rank in the **World Bank's Doing Business Report** from **142 in 2014 to 63 in 2019**, reflecting significant improvements in the regulatory environment.
- India's position in the **IMD World Competitiveness Ranking** improved from 43 in 2021 to 41 in 2025.
- India has consistently been placed in **Group A of the World Bank's GovTech Maturity Index**, indicating advanced digital governance capabilities.
- The **United Nations E-Government Survey** has recognized India's progress in online public services, digital infrastructure, and technology-enabled governance.

Key Government Initiatives

- The Digital India Land Records Modernisation Programme (DILRMP)** has digitised land records and cadastral maps, reducing disputes and improving transparency.
 - The Unique Land Parcel Identification Number (ULPIN)** has created a unique digital identity for land parcels, enabling accurate land management.
- Labour Reforms:** The Labour Codes have consolidated multiple labour laws into simplified legal frameworks.
 - Single registration, single returns, and all-India licences have reduced compliance costs for businesses.
- Government e-Marketplace (GeM)** has expanded procurement opportunities for MSMEs, startups, women entrepreneurs, and self-help groups through a transparent digital platform. It has promoted inclusive participation in public procurement.

- Open Network for Digital Commerce (ONDC)** has created an open and interoperable digital commerce ecosystem that enables small businesses to compete on equal terms with large e-commerce platforms.
- Environmental Clearances:** The PARIVESH portal has digitised environmental, forest, wildlife, and coastal regulation clearances.
- MSME Formalisation:** The Udyam Registration Portal has enabled paperless and self-declaration-based registration of MSMEs.
- Jan Vishwas Reforms** have decriminalised hundreds of minor business-related offences. These reforms have reduced the fear of criminal prosecution for procedural violations and encouraged voluntary compliance.

What is Ease of Living?

- Ease of Living refers to the **ability of citizens to access basic services, opportunities, infrastructure, and governance** in a convenient, affordable, and dignified manner.
- It focuses on improving the quality of everyday life by ensuring access to housing, healthcare, sanitation, transportation, financial services, and digital governance.
 - It is a **key pillar of inclusive and sustainable development**.
- India has taken various initiatives for enhancing ease of living through enhanced access to housing, sanitation, drinking water, electricity, financial services, connectivity, and citizen-centric governance.

Key Government Initiatives

- Pradhan Mantri Awas Yojna Urban (PMAY-U):** India has significantly expanded access to affordable housing through the Pradhan Mantri Awas Yojana (PMAY).
- The Jal Jeevan Mission (JJM),** with its goal of Har Ghar Jal, has delivered rapid expansion in piped water access. As of June 2026, over 15.86 (81.94%) crore households enjoy clean piped water.
- The JAM Trinity of Jan Dhan, Aadhaar, and Mobile** became India's welfare delivery backbone.
 - Pradhan Mantri Jan Dhan Yojna (PMJDY)** was the first pillar, opening banking access for crores of excluded citizens.
 - In FY 2024–25 alone, **₹6.9 lakh crore** was credited directly under **Direct Benefit Transfer (DBT) schemes**.

- **Pradhan Mantri Mudra Yojna (PMMY):** More than 57 crore collateral-free loans have been sanctioned to micro and small entrepreneurs. Women account for nearly two-thirds of Mudra beneficiaries.

What is Atmanirbhar Bharat?

- Atmanirbhar Bharat (Self-Reliant India) is a national development strategy aimed at **strengthening India's domestic capabilities in manufacturing, technology, infrastructure, innovation and strategic sectors** while remaining integrated with global value chains.

Key Government Initiatives

- **Make in India:** Launched in 2014, it seeks to transform India into a global manufacturing hub by promoting investment, fostering innovation, and building world-class infrastructure.
- **Production Linked Incentive (PLI) Scheme:** Introduced to boost domestic manufacturing by providing performance-linked financial incentives across key sectors, while integrating Indian industries with global value chains.
- **Startup India:** Launched in 2016 to build a startup ecosystem through regulatory simplification, tax incentives, funding support, incubation, and innovation-driven entrepreneurship.
- **India Semiconductor Mission** aims to develop a resilient semiconductor and display manufacturing ecosystem by supporting fabrication facilities, chip design, packaging, and research to strengthen technological self-reliance.
- **National Green Hydrogen Mission:** Launched in 2023 to position India as a global hub for the production, utilisation, and export of green hydrogen and its derivatives, while supporting energy security and decarbonisation.
- **PM GatiShakti National Master Plan:** The initiative promotes integrated infrastructure planning across sectors.
 - It reduces project delays and improves coordination among government agencies.

What are the challenges?

- **Institutional Bottlenecks:** Complex regulations, compliance burdens, and delays in approvals affect businesses and public service delivery.
- **Inter-Departmental Coordination:** Departmental silos and limited coordination among ministries lead to policy overlaps, implementation delays, and inefficient resource utilisation.

- **Regional Disparities:** The variations persist across States and districts in access to infrastructure, healthcare, education, digital connectivity, and economic opportunities.
- **Global Economic Uncertainties:** Geopolitical tensions, supply chain disruptions, climate risks, and protectionist measures pose challenges to sustained growth and self-reliance.

Way Ahead

- **Strengthen the whole-of-government approach** by breaking departmental silos, fostering integrated planning, and leveraging digital platforms such as **PM Gati Shakti** to improve governance, service delivery, and project implementation.
- **Pursue citizen-centric and growth-oriented reforms** that simultaneously improve ease of doing business, enhance ease of living, and strengthen Atmanirbhar Bharat, thereby accelerating India's journey towards **Viksit Bharat 2047**.

Source: TH, PIB, PIB

NEWS IN SHORT

INDIA'S DIMINISHING COTTON PRODUCTIVITY

Context

- The stagnation in India's cotton productivity has led to a debate on whether **new genetically modified (GM) cotton** technologies alone can improve productivity or whether greater emphasis is needed on soil health and agronomic practices.

About

- India is the **world's largest cotton producer by area** (37% of the entire global cotton land) and one of the largest producers of cotton globally.
- Bt cotton, especially **Bollgard-II**, has led to an **88 percent** productivity increase of cotton between **2002 and 2013**.
- However, cotton productivity has stagnated since 2014–15 due to structural challenges such as soil degradation, climate variability, pest resistance, and inadequate agronomic practices.

Soil Degradation Causing Stagnation of Cotton Productivity

- According to FAO, **nearly 32 per cent of Indian land** is degraded and **25 per cent faces desertification**.

- Soil organic carbon in Indian croplands averages just **0.3-0.6 percent**, far below the globally accepted **minimum of 1-1.5 percent** for productive soils, with critically low levels below **0.25 percent** recorded across cotton-growing regions of **Rajasthan, Gujarat, Madhya Pradesh and Maharashtra**.
- Low Soil Organic Carbon reduces soil fertility, moisture retention, nutrient availability, and resilience to drought and climate stress.

Geographical Condition for Cotton Cultivation

- Cotton is a **semi-xerophyte**, is grown in tropical & sub tropical conditions.
- A minimum temperature of **15°C** is required for better germination at field conditions.
 - The optimum temperature for vegetative growth is 21-27°C & it can tolerate temperature to the extent of 43°C but temperature below 21°C is detrimental to the crop.
- Cotton is grown on a **variety of soils** ranging from well drained deep alluvial soils in the north to black clayey soils of varying depth in the central region and in black and mixed black and red soils in the south zone.
- Cotton is semi-tolerant to salinity and sensitive to water logging and thus **prefers well drained soils**.

Source: IE

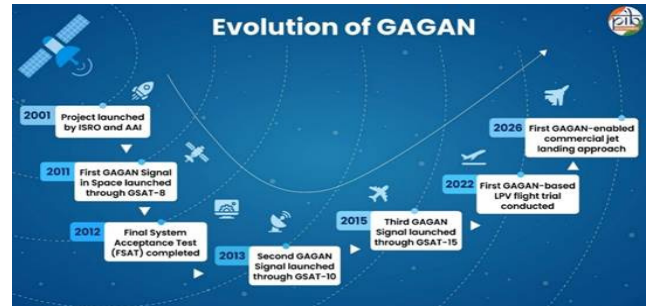
GAGAN: NAVIGATING INDIA'S SKIES WITH PRECISION

Context

- India has achieved a major milestone in satellite navigation with GAGAN (GPS Aided GEO Augmented Navigation) becoming the first Satellite-Based Augmentation System (SBAS) certified for the equatorial region.
- The DGCA also recently conducted India's first satellite-based landing system approach on a commercial aircraft using GAGAN.

About GAGAN

- GAGAN is India's indigenous Satellite-Based Augmentation System (SBAS), jointly developed by the Indian Space Research Organisation (ISRO) and the Airports Authority of India (AAI).
- Operational since **2015**, it enhances the **accuracy, availability, and integrity** of GPS signals by providing real-time correction information.



Significance

- First **SBAS certified for the equatorial region**, where ionospheric disturbances affect satellite navigation.
- Enhances resilience against **GPS spoofing and jamming**.
- Strengthens India's indigenous navigation capabilities under **Aatmanirbhar Bharat**.
- Places India among a select group of countries with an operational SBAS.

Applications

- Besides aviation, GAGAN supports:
 - ♦ Maritime navigation
 - ♦ Intelligent transport and fleet management
 - ♦ Railway operations
 - ♦ Disaster management
 - ♦ Defence, telecom synchronisation, and geospatial mapping.

Do you know?

- The integrated architecture of GAGAN forms an important part of India's broader satellite navigation programme. Alongside GAGAN, India has developed the **Navigation with Indian Constellation (NavIC)**, its indigenous regional navigation satellite system.

GAGAN	NavIC
Satellite-Based Augmentation System (SBAS)	Independent regional navigation satellite system
Improves GPS through real-time corrections and integrity information	Provides positioning, navigation and timing services
Supports civil aviation across the Indian Flight Information Region	Coverage area includes India and a region up to 1500 km beyond Indian boundary

Source: PIB

INDIA'S FIRST PINS INSTRUMENT APPROACH PROCEDURE FOR HELICOPTER OPERATIONS

Context

- India has achieved a major milestone with the approval of the country's **first Private Point-in-**

Space (PinS) instrument approach procedure for helicopter operations at **Undavalli Heliport**.

About

- It was developed by the **Airports Authority of India (AAI)** and approved by the **Directorate General of Civil Aviation (DGCA)**.
 - It has been designed in accordance with **DGCA regulations and the International Civil Aviation Organization (ICAO) Standards**.
- PinS procedures use advanced satellite-based navigation technology** to enable helicopters to conduct safe and precise instrument approaches to heliports that do not have conventional instrument landing infrastructure.
 - PinS is **particularly beneficial during adverse weather conditions** and in areas where **ground-based navigation aids are not available**.
- Application:** The approval is expected to pave the way for the development of **similar PinS procedures across the country**, benefiting emergency medical services, disaster relief operations, tourism, offshore activities, pilgrimage services, corporate aviation, and regional connectivity.
 - It will enable safer Instrument Flight Rules (IFR) operations to remote and strategically important locations and improve operational reliability.

Source: AIR

31ST CHIEF OF THE ARMY STAFF

Context

- General Dhiraj Seth** took charge as the **31st Chief of the Army Staff from General Upendra Dwivedi**, who superannuated after more than four decades of distinguished service to the nation.

Chief of the Army Staff (COAS)

- COAS is the **professional head and highest ranking serving officer** of the Indian Army.
- COAS is responsible for the command, training, administration, discipline and operational readiness of the Indian Army.
 - But under **Article 53(2) of the Constitution**, the President of India is the Supreme Commander of the Armed Forces.

- The COAS is appointed by the **Appointments Committee of the Cabinet (ACC)** for a tenure of **three years or up to the age of 62**.
- The COAS works within the civilian-led defence structure headed by the Cabinet Committee on Security (CCS) and the Ministry of Defence.

Latest Announcements

- The new Chief of Army Staff has launched the **"VIJAY"** roadmap to reorient the **Indian Army into a technology-centric, future-ready force capable** of operating in conventional, hybrid and emerging domains of warfare.
- The roadmap focuses on Vigilance (operational readiness), Innovation and Transformation (modern technologies and doctrine), Jointness and Integration (greater synergy amongst the armed forces and a Whole-of-Nation approach), Atmanirbharta (indigenous defence technologies), and Yodha First (soldier welfare, training, veterans and Veer Naris).
- The vision is to bolster national security and boost self-reliance and military preparedness in line with the Decade of Transformation and Viksit Bharat 2047.

Source :Air

TRANSCASPIAN MARINKA (SCHIZOTHORAX PELZAMI)

In News

- A clan in Arunachal Pradesh's East Kameng district has started a conservation campaign to protect the **ray-finned fish Schizothorax pelzami (Transcasian marinka)**.

Transcasian marinka (Schizothorax pelzami)

- Habitat type:** Freshwater, benthopelagic (bottom-dwelling in rivers).
- Distribution:** It is found in rivers of Turkmenistan, Afghanistan, and northeastern Iran, thriving in temperate benthopelagic environments.
- IUCN Red List Status :** It has been assessed as Least Concern due to its large range and the lack of widespread threats in this area.
- Latest Conservation in India :** The Sangno clan of Arunachal Pradesh's East Kameng district has started a community-based conservation initiative with 52 fingerlings of the Transcasian marinka (Schizothorax pelzami), **locally called Ngarsing**, released into a mahseer-free stretch of the Richaso stream.

Source :TH