

DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min Date: 19-08-2025

Table of Content

The India-Africa-UAE Trilateral Framework

Critical Role of the Space Programme for Viksit Bharat by 2047

Public Accounts Committee on Toll Collection

Off Budget Borrowings

Radioactive Contamination in Punjab's Groundwater

Soaps and Detergents

Deep Ocean Mission: India's Gateway to the Ocean Floor

NEWS IN SHORT

Jan Vishwas (Amendment of Provisions) Bill, 2025

Visva-Bharati University

Primary Amebic Meningoencephalitis (PAM)

UNHCR Suspends Repatriation of Sri Lankan Tamil Refugees

NAVYA Initiative

THE INDIA-AFRICA-UAE TRILATERAL FRAMEWORK

Context

 Against the backdrop of BRICS 2026 in India, a stronger India–Africa–UAE (IAU) trilateral framework is emerging with the entry of new members including the UAE, Egypt, and Ethiopia in the group.

Background

- The India-Africa-UAE trilateral partnership is an evolving concept focused on strengthening economic cooperation and connectivity, particularly in the areas of trade, investment, and infrastructure development.
- Back in 2019, India and the United Arab Emirates (UAE) signed a Memorandum of Understanding on development cooperation in Africa.
- The evolution is reflected in initiatives such as the Bharat Africa Setu, conceptualised in 2025.
 - It is a trade ecosystem launched by India and DP World (UAE) to double India-Africa trade by leveraging logistics, export finance, and certification services.

Existing Bilateral Ties

- India and the UAE signed a Comprehensive Economic Partnership Agreement (CEPA) in 2022.
 - Aim: Raise non-oil trade to US\$ 100 billion annually by 2027. Already, bilateral trade has reached US\$57.8 billion in non-oil trade (US\$85 billion including oil).
 - Sectors unlocked: Renewable energy, civil nuclear cooperation, fintech, logistics, aviation, food security, critical minerals, space, and advanced technologies.
- UAE and Africa: Gulf countries invested over US\$100 billion in Africa (2012–2022), with the UAE leading the pack.
 - UAE investments surpass those of China,
 France, and the UK, extending beyond traditional sectors into food parks, agri-tech, fintech, and renewable energy.
 - The UAE is also backing new economic zones in key African states, such as the **digital incubator ecosystem in Ghana.**
- India and Africa: India has long-standing cultural and historical ties with African countries, but current trade levels remain modest. Africa accounts for 6% of India's exports and 5.6% of imports.

 Demographic synergy: India's demographic dividend peaks by 2041 whereas Africa will see over 60% of its population in working age by 2050, making it the next global growth hub.

Pillars of the IAU Trilateral Cooperation

- Industrial and Technological Cooperation
 - Co-development in agritech, edtech, fintech, Al-based learning, clean energy, and advanced manufacturing.
 - Platforms for joint intellectual property, innovation sandboxes, and start-up exchanges.
 - Bharat Mart (Dubai) will provide Indian SMEs and women-led enterprises a global export hub.
- Investment and Financing Collaboration
 - Integration of India's GIFT City, UAE's DIFC, and emerging African hubs (Lagos/Kigali/ Nairobi) for seamless capital flows.
 - Potential joint investment fund for SMEs, startups, and infrastructure.
 - Cross-border digital payment integration through UPI-RuPay connectivity.
- Research, Vocational and Academic Partnerships
 - Academic partnerships, fellowship exchanges, and vocational upskilling.
 - Growing number of African students in India and institutional tie-ups with UAE universities.
 - Cultural festivals, tourism exchanges, and heritage commerce.

Strategic and Geopolitical Significance

- Leadership in the Global South: The trilateral framework represents a fresh model of South—South cooperation, showcasing how emerging powers can shape global governance.
- Strengthening Supply Chain Resilience: By diversifying trade and connectivity routes, the partnership helps reduce excessive reliance on Western-dominated or China-centric supply chains.
- Enhanced Security Collaboration: The three regions can work together on maritime safety in the Indian Ocean, as well as emerging domains like cyber defense and counter-terrorism.

Challenges Ahead

- **Economic Asymmetries:** Bridging the development gap between the UAE and less-developed African economies.
- **Political Coordination:** Harmonising diverse governance models and policy priorities.



- **Global Competition:** Ensuring visibility amid forums like G20, IPEF, and ASEAN.
- Logistical Constraints: Large-scale connectivity projects across three continents face financing and coordination hurdles.

Concluding remarks

- At a time when the world is scrambling for resources and transactional partnerships are on the rise, the India, Africa and UAE trilateral offers a framework that is both practical and principled.
- In this Afro-Asian Century, such an initiative reflects the need for emerging economies to reshape development models and build resilient, diversified partnerships and supply chains that reduce vulnerability to global disruptions.

Source: ORF

CRITICAL ROLE OF THE SPACE PROGRAMME FOR VIKSIT BHARAT BY 2047

In News

 The recent Group Captain Shubhanshu Shukla journey to ISS marks India's ascent as a major space power, aligning with the vision of Viksit Bharat 2047 and embracing the philosophy of Vishwabandhu Bharat in the space sector.

Dimensions of India's Space Programme

- Scientific & Technological Dimension:
 - Cost-effective innovation: India's missions, such as Chandrayaan-3, succeeded in lunar landing at about 1/10th the cost of global peers; the ISS research mission was also completed at a fraction of international costs.
 - Indigenous R&D: Development of launch vehicles (PSLV, GSLV Mk-III), navigation (NavIC), and cryogenic technology showcases India's self-reliance.

• Economic Dimension:

- Space Economy: Currently worth ~\$8 billion, India's space sector is projected to reach \$40 billion by 2040.
- Startup ecosystem: Home to over 300 startups like Skyroot Aerospace, Agnikul Cosmos, and Pixxel, supported by IN-SPACe and NSIL.
- Satellite services: Drive growth in broadband (OneWeb, Jio-Satellite), agriculture, logistics, and financial inclusion.
- Diplomatic & Global Dimension (Vishwabandhu Bharat):

- South-South cooperation: India provides satellites and launch services to African and Asian nations (e.g., GSAT-9 "South Asia Satellite").
- International collaborations: Key projects with NASA (NISAR mission), Artemis Accords, and partnerships with France, Russia, SpaceX, and Axiom Space.
- Soft power: India is recognized as a responsible, affordable space launch provider fostering goodwill worldwide.

Social & Developmental Dimension:

- Health & education: Telemedicine and teleeducation programs connect rural India via INSAT satellites.
- Agriculture: Satellite-based yield forecasting, soil moisture mapping, and precision farming increase productivity.
- Disaster management: Real-time alerts and tracking (INSAT, RISAT) bolster climate resilience.
- **Urban planning:** Remote sensing and GIS underpin smart city development.
- Inclusivity: Spaces technology benefits extend beyond urban areas, supporting rural and marginalized communities.

Security & Strategic Dimension:

- Indigenous navigation: NavIC ensures India is not reliant on foreign navigation systems.
- Military use: Development of military communication and surveillance satellites; dual-use technologies enhance security.
- ASAT Test (2019): Demonstration of antisatellite capability established deterrence in space.
- **Geopolitical leverage:** Strategic autonomy enhanced vis-à-vis the US, China, and Russia.

India's Major Space Initiatives Roadmap



Challenges

- Rising competition from private global giants (SpaceX, Blue Origin, etc.).
- Space debris and orbital congestion issues.
- Low R&D investment.

- Balancing commercialization with national security.
- Need for clear regulatory frameworks for startups and FDI.

Way Forward

- Increase R&D investment to meet global benchmarks.
- Facilitate private sector participation with simplified procedures.
- Enhance space diplomacy—especially with the Global South and major powers.
- Prioritize sustainability and responsible use of outer space.

Source: PIB

PUBLIC ACCOUNTS COMMITTEE ON TOLL COLLECTION

In News

 The Public Accounts Committee (PAC) of Parliament has proposed major changes to toll collection on national highways, including a recommendation to end the practice of perpetual tolling.

Laws linked to Toll Collection

- Under the National Highways Act, 1956, the government is empowered to levy user fees on national highways, with the policy governed by the 2008 NH Fee Rules.
- These fees are not tied to construction cost recovery but are based on fixed base rates, increasing annually by 3% and partially indexed to inflation (WPI).
- **Toll collection** can be done by the Union government for publicly funded roads or by concessionaires under BoT, or InvIT models.
- A 2008 amendment allows toll collection to continue indefinitely, even after concession periods end, with revenue then going to the Consolidated Fund of India.
 - Toll collections rose significantly—from 1,046 crore in 2005–06 to 55,000 crore in 2023–24, with 25,000 crore going to the government and the rest to concessionaires.

Recent Recommendations

 The Public Accounts Committee (PAC) has recommended ending or reducing tolls on national highways once construction and maintenance costs are recovered.

- The panel criticised the current system of indefinite toll collection, calling it a "regime of perpetual tolling," and proposed that any tolling beyond cost recovery requires approval from an independent regulatory authority.
- It also suggested creating such an authority to ensure transparency and fairness in toll pricing and regulation.
- The PAC called for toll reimbursements during periods of construction when road usage is disrupted.
- On FASTags, the panel flagged continued traffic delays due to scanner issues and recommended setting up on-site facilities for users to manage their FASTags.

Governments Response

 The Ministry of Road Transport and Highways acknowledged the Committee's concerns and informed the PAC that it has initiated a comprehensive study with NITI Aayog to revise the user fee determination framework.

Do you know?

- The Public Accounts Committee (PAC), established in 1921 under the Montague-Chelmsford Reforms and mandated by the Government of India Act, 1919 to examine government accounts to detect irregularities, deviations, and inefficiencies.
 - It became a formal Parliamentary Committee on January 26, 1950.
 - It is regarded as one of the most prestigious committees and is reconstituted annually and comprises 15 Lok Sabha members elected by proportional representation, along with 7 Rajya Sabha members elected similarly.
- Functions: It is a key parliamentary tool for monitoring government financial activities. It examines appropriation and finance accounts, as well as CAG reports, except for those assigned to the Committee on Public Undertakings.

Source :TH

OFF BUDGET BORROWINGS

Context

 Indian states are reducing reliance on off-budget borrowings, with the Centre tightening norms by including such loans within states' fiscal limits under **Article 293(3)** of the Constitution.



 Article 293(3) of the Constitution of India stipulates that a state cannot borrow money without the permission of the union government if it still owes a loan taken from or guaranteed by the union government.

Off-Budget Borrowings

- Off-budget borrowing also known as extra budget financing is used by the government to finance its expenditures while keeping the debt off from its annual statement.
- Such borrowings are not counted in the fiscal deficit calculation, even though they have fiscal implications.

How are Off-Budget Borrowings Raised?

- The government asks implementing agencies to raise required funds from the market through loans or by issuing bonds.
 - Public Sector Undertakings (PSUs) and Special Purpose Vehicles (SPVs) are commonly used to raise such funds.
- These borrowings are typically directed towards subsidies, infrastructure, and welfare schemes.
- Concern: Off-budget financing allows governments to bypass fiscal discipline mandated under the Fiscal Responsibility and Budget Management (FRBM) Act, 2003.

Trends in Off-Budget Borrowings

- Off-budget borrowings surged during the pandemic and touched ₹67,181 crore in FY 2020-21, before moderating to ₹29,335 crore in FY 2024-25.
- **In FY 2024-25**, the top four states with the highest off-budget borrowings were:

Maharashtra: 13,990 crore
Karnataka: 5,438 crore
Telangana: 2,697 crore
Kerala: 983 crore

Government Actions

- Centre's Restrictions: Since FY 2021-22, all off-budget loans via SPVs are treated as state borrowings and included in their net borrowing ceiling.
- **Discontinuation at Central Level:** The Union Government stopped its own off-budget borrowings from FY 2022-23.
- Special Assistance to States for Capital Investment (SASCI): Launched in FY 2020-21, it provides long-term, interest-free loans to states for infrastructure projects, encouraging them to shift away from opaque borrowings.

Source: LM

RADIOACTIVE CONTAMINATION IN PUNJAB'S GROUNDWATER

Context

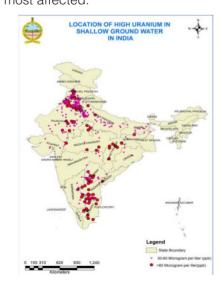
 The Parliamentary Standing Committee on Water Resources raised concern over the continued presence of uranium contamination in drinking water sources in Punjab and called for urgent solutions to safeguard public health.

What is uranium contamination?

- Uranium contamination refers to the presence of excessive levels of uranium in the environment, primarily in water and soil, exceeding safe limits.
- Safe Limits Prescribed:
 - World Health Organization (WHO): Uranium safe limit: 0.03 mg/L.
 - Bureau of Indian Standards (BIS): Also follows 0.03 mg/L as permissible limit.
- Health Impacts: Uranium contamination poses risks due to both its radioactivity and chemical toxicity.
 - Ingestion of contaminated water or food can lead to Chronic Kidney Disease (CKD), skeletal damage, cancers, reproductive health issues.

Uranium contamination in India

- According to the Central Ground Water Board (CGWB) survey of 2019–20, out of nearly 16,000 groundwater samples, around 450 exceeded the World Health Organization's (WHO) permissible limit.
- Uranium contamination is reported to be more prevalent in northwest India's alluvial aquifers and in southern India's hard-rock aquifers.
 - The states of Punjab, Haryana, Rajasthan, Telangana, Andhra Pradesh, Madhya Pradesh, and Gujarat were found to be the most affected.



Sources of contamination

- Natural Sources: Uranium is a naturally occurring radioactive element found in the Earth's crust.
 - Geogenic processes, such as the weathering of uranium-bearing rocks and the movement of groundwater, can release uranium into water sources.
- Anthropogenic Sources:
 - Groundwater depletion: Lowers the water table and alters aquifer chemistry, leading to uranium release.
 - Industrial Processes: Some industrial processes, like those involving phosphate fertilizers and nuclear facilities, can also release uranium.
 - Mining and Milling: Uranium mining and processing can release uranium into the surrounding environment.

Government Measures

- The Department of Atomic Energy (DAE) and Bhabha Atomic Research Centre (BARC) have developed hybrid membrane techniques and Reverse Osmosis (RO) plants, which have been installed in affected areas of Punjab and Haryana on a pilot basis.
- Under the National Aquifer Mapping and Management Programme (NAQUIM), CGWB is generating scientific data to understand aquifer behavior and provide site-specific solutions to mitigate contamination risks.
- The Council of Scientific and Industrial Research (CSIR) has been engaged in developing low-cost adsorbents and nanomaterials to filter uranium from groundwater.
- India has collaborated with the International Atomic Energy Agency (IAEA) for capacity building and technical expertise in monitoring uranium levels in drinking water and strengthening laboratory infrastructure.

Judicial Intervention

- In 2015, the Punjab and Haryana High Court took notice of uranium contamination in the region's groundwater and directed the state governments to take remedial steps.
- In Subhash Kumar v. State of Bihar and Others (1991), the Supreme Court of India ruled that the right to life under **Article 21** of the Constitution includes the right to pollution-free water and air.

Way Ahead

 The government should formally recognize uranium as a major groundwater contaminant, similar to arsenic and fluoride, so that dedicated funding and interventions can be streamlined.

- Public awareness campaigns must be conducted to educate rural communities about health risks of uranium contamination and safe water usage practices.
- Low-cost, decentralized treatment technologies such as adsorption filters, ion-exchange systems, and community-level RO plants should be deployed widely in affected villages.

Source: TOI

SOAPS AND DETERGENTS

In Context

 During World War I, shortages of animal fats and oils spurred chemists to find alternatives. This led to the development of synthetic cleaning agents: the first commercial "soap-like" detergents emerged in the mid-1930s.

What are Soaps & Detergents?

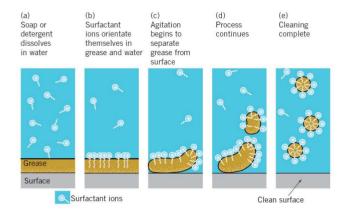
- **Soaps:** Naturally derived, made from fatty acids and alkali; work through surfactant action.
- **Detergents:** First widely made in the 1930s; synthetic surfactants; effective in hard water.
- **Composition:** Sodium (Na) or Potassium (K) salts of fatty acids (RCOONa or RCOOK).
- Raw Materials: Derived from vegetable oils (coconut, palm, olive) or animal fats.

Historical Background

- 2800 BC (Mesopotamia): Earliest recorded use of soap-like substances.
- **Ancient India:** Soap nuts, tree bark, leaves, and flowers were used as natural cleansers.
- Industrial Revolution: Mass production of soap began in Europe, though soaps remained luxury goods taxed heavily until the 19th century.
- World War I: Shortage of natural oils led to the birth of synthetic detergents, with commercialscale detergent production beginning in the 1930s.

Working Mechanism of Soaps and Detergents

- Amphiphilic Nature:
 - **Hydrophilic** (water-loving) end attracts water.
 - Hydrophobic (water-repelling) end embeds into grease/dirt.
- **Surfactants**: Reduce water's surface tension and dirt dislodges when scrubbing/rinsing.
- **Detergents:** Soap-like but formulated with stronger surfactants, bleach, and fragrances; more effective in hard water.



Economic and Social Dimension

- Industrial Significance: Large-scale global industry worth billions of dollars, employing millions.
- Public Health: Widespread use of soap linked to reduced infectious diseases, especially diarrhoea and skin ailments.
 - Soap penetration in India is high (~98% households), reflecting its role in sanitation (Swachh Bharat Abhiyan).

Environmental Concerns

 Soaps are generally biodegradable (natural fatty acids) however, some surfactants (sulphonates) persist in the environment. Phosphates in detergents cause eutrophication (nutrient pollution, algal blooms).

Source: TH

DEEP OCEAN MISSION: INDIA'S GATEWAY TO THE OCEAN FLOOR

Context

- Recently, two Indian aquanauts successfully conducted deep-sea dives in the Atlantic Ocean, part of Samudrayaan Project, under the Deep Ocean Mission.
 - Over 100 kg of cobalt-rich polymetallic nodules were collected from 1,173 meters depth in the Andaman Sea.

About the Deep Ocean Mission

- It was launched by the **Ministry of Earth Sciences (MoES)** with an investment of 4,077 crore over five years on September 7, 2021.
- It aims to develop technologies for exploring and sustainably utilizing deep ocean resources, and to support India's Blue Economy and scientific leadership.
 - Blue Economy is a core growth dimension, with potential to push India's maritime economy beyond ₹100 billion.

 It is being implemented in phases and aligns with the UN Decade of Ocean Science for Sustainable Development (2021–2030).

Key Components of the Mission

 Samudrayaan Project (Deep-Sea Mining & Manned Submersible): Development of a manned submersible to carry three people up to 6,000 metres depth.



- Creation of an Integrated Mining System for extracting polymetallic nodules in the Central Indian Ocean.
- Ocean Climate Change Advisory Services: Building observations and model suites to forecast climate variables from seasonal to decadal scales.
 - Supports better planning for **coastal communities and tourism**.
- Biodiversity Exploration & Conservation: Bio-prospecting of deep-sea flora, fauna, and microbes.
 - Promotes sustainable use of marine biological resources for fisheries and allied sectors.
- Deep Ocean Survey & Exploration: Identification of multi-metal hydrothermal sulphide sites along the mid-ocean ridges.
 - Expands India's access to deep-sea mineral reserves.
- Energy and Freshwater from the Ocean: Proof-of-concept for Ocean Thermal Energy

Conversion (OTEC) powered desalination plants.

- Advances offshore renewable energy and water security.
- Advanced Marine Station for Ocean Biology: Establishment of a research hub for ocean biology and engineering.
 - Facilitates innovation, incubation, and industrial applications of marine science.

Strategic Importance

- India's unique maritime geography with 11,098.81 km of coastline, nine coastal states, and 1,382 islands — makes it a natural leader in ocean science. The mission supports:
 - Fisheries and aquaculture;
 - Marine biotechnology;
 - Coastal tourism;
 - Energy security
- Prime Minister, in his recent Independence Day address, emphasized India's push toward a 'Samudra Manthan' — a mission-mode effort to explore oil and gas reserves beneath the ocean floor.
- The Deep Ocean Mission is now being expanded into a National Deep Water Exploration Mission.

Source: DD News

- 67 provisions aim to promote ease of living.
- The amendments also include provisions under the New Delhi Municipal Council Act, 1994, and the Motor Vehicles Act, 1988, to make compliance smoother for citizens.
- It proposes **replacing minor, technical, and procedural offence**s with monetary penalties or warnings, especially for first-time contraventions under 76 offences.
- **Penalties made proportionate,** with graduated penalties for repeated offences.
- Designated officers empowered to impose penalties through administrative processes, reducing judicial burden.
- Automatic 10% increase in fines every three years is proposed to avoid frequent legislative amendments.
- Further decriminalisation is suggested for laws already covered under the 2023 Act, including the Motor Vehicles Act, Tea Act, and Drugs and Cosmetics Act.

Objectives

- The Jan Vishwas (Amendment of Provisions)
 Bill, 2025 marks a significant milestone in India's regulatory reform journey.
- It reflects the Government's commitment to "Minimum Government, Maximum Governance" and will catalyze sustainable economic growth and improved ease of doing business.

Source :DD News

NEWS IN SHORT

JAN VISHWAS (AMENDMENT OF PROVISIONS) BILL, 2025

In News

 The Union Minister for Commerce and Industry introduced the Jan Vishwas (Amendment of Provisions) Bill, 2025 in the Lok Sabha.

Jan Vishwas (Amendment of Provisions) Bill, 2025

- The Bill builds upon the Jan Vishwas (Amendment of Provisions) Act, 2023, which was the first consolidated legislation to decriminalise minor offences across multiple laws.
- The 2023 Act, notified in August 2023, had decriminalised 183 provisions across 42 Central Acts administered by 19 ministries and departments.

Key Features of New Bill

- The 2025 Bill targets 355 provisions across 16 Central Acts under 10 ministries.
 - 288 provisions are proposed for decriminalisation.

VISVA-BHARATI UNIVERSITY

In News

- Visva-Bharati University in West Bengal denied permission for a lecture on Nobel laureate Amartya Sen.
 - Visva-Bharati's PRO claimed the denial was due to a scheduling conflict with the Rabindra Saptaha heritage event.

Visva-Bharati University

- It was founded by Rabindranath Tagore in 1921 in Santiniketan, West Bengal.
- It is a unique institution that blends Indian traditions with global educational ideals.
- In 1951, it was recognized as a **Central University** and an institution of national importance.

Key Functionaries

 The President of India is the Paridarsaka (Visitor) of the University, the Governor of West Bengal is the Pradhana (Rector), and the Prime Minister of India acts as the Acharya (Chancellor). The



President of India appoints the Upacharya (Vicechancellor) of the University.

Characteristics

- It emphasizes holistic learning, open-air education, and creativity, fostering a deep connection with nature.
- It is Known for its focus on arts, music, literature, and rural development.
- It remains a hub of cultural exchange and intellectual pursuit, reflecting Tagore's vision of universal harmony and knowledge.

Source: TH

PRIMARY AMEBIC MENINGOENCEPHALITIS (PAM)

In News

 The Health department in Kozhikode, Kerala, has issued an alert against primary amoebic meningoencephalitis (PAM) in the district in view of cases of the infection and a death.

Primary amebic meningoencephalitis (PAM)

- Primary amebic meningoencephalitis (PAM) is a rare brain infection caused by Naegleria fowleri.
 - N. fowleri is a free-living amoeba found in warm freshwater and soil.
 - An ameba is a single-celled living organism that is too small to be seen without a microscope.
- **Transmission:** Infection typically occurs when contaminated water enters the nose during activities like swimming, nasal cleansing in religious rituals, or sinus irrigation.
 - It does not spread through drinking water or person-to-person contact.
- **Effect**: It travels to the brain, destroying tissue and causing brain swelling.
- **Treatment and Precautions :** To reduce risk, limit water entering the nose during water activities.
 - Though some drugs work against N. fowleri in labs, they have limited success in treating infections, which are almost always fatal.

Source:TH

UNHCR SUSPENDS REPATRIATION OF SRI LANKAN TAMIL REFUGEES

In News

 The United Nations High Commissioner for Refugees (UNHCR) recently suspended the repatriation of Sri Lankan Tamil refugees from India after returnees were reportedly arrested upon their arrival in Sri Lanka.

About United Nations High Commissioner for Refugees (UNHCR)

- It is a **specialized agency** of the United Nations mandated to protect and support refugees, forcibly displaced communities, and stateless people.
- Established in 1950, the UNHCR leads international action to safeguard the rights and well-being of refugees and coordinates efforts for their voluntary repatriation, local integration, or resettlement to a third country when conditions allow.
- The agency operates under the principles of international refugee law, especially the 1951 Refugee Convention and its 1967 Protocol.

Source: IE

NAVYA INITIATIVE

Context

 The Union minister provided the information on the NAVYA initiative in the written reply in Lok Sabha.

About

- NAVYA (Nurturing Aspirations through Vocational training for Young Adolescent Girls) is a joint initiative of the Ministry of Skill Development & Entrepreneurship and the Ministry of Women & Child Development, launched in June 2025.
- It aims to empower adolescent girls (16–18 years) in aspirational districts, with a minimum qualification of Class 10, by equipping them with relevant skills for socio-economic independence.
- Under NAVYA, 3,850 adolescent girls will be trained under Pradhan Mantri Kaushal Vikas Yojana 4.0 (PMKVY 4.0) in non-traditional and emerging sectors such as digital marketing, cybersecurity, Al-enabled services, and green jobs.
- Training will also include life skills, financial literacy, and digital competence to prepare them for current and future workforce demands.

Source: PIB

MAIZE CULTIVATION

Context

 Recent reports highlight that maize is increasingly becoming the preferred crop for farmers in Uttar Pradesh (UP), with many shifting from traditional crops to maize.



Reasons

- Low Water Requirement: Unlike water-intensive paddy and sugarcane, maize consumes less water, making it suitable for regions facing irrigation constraints.
- Rising Industrial Demand: Growing demand from ethanol blending policy (E20 target), poultry feed, and starch industries is pushing maize cultivation.
- Economic Viability: Market prices have touched ₹2,500 per quintal, higher than the Minimum Support Price (MSP) of 2,225 per quintal (2024–25 season).

Geographical Conditions for Maize Cultivation

- **Soil:** Maize grows well in well-drained, fertile, sandy loam to silty loam soils. **Alluvial soils** are particularly suitable for maize cultivation.
 - The ideal pH for maize is between 5.5 and 7.5.
 - **Drainage:** Waterlogging can be harmful to maize, so good drainage is essential.
- **Temperature:** Maize is a warm-weather crop that prefers temperatures between 21°C and 32°C.
- **Precipitation:** Requires 50 100 cm of well-distributed rainfall.
- **Season:** In India, maize is typically grown during the **Kharif season** (June-September).
 - However, it can also be sown in other seasons depending on the region and specific variety.

Source: TOI

