

DAILY CURRENT AFFAIRS (DCA)

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4 YEARS OF PRADHAN MANTRI MATSYA SAMPADA YOJANA (PMMSY)

Context

 Pradhan Mantri Matsya Sampada Yojana (PMMSY) has completed four years of Implementation.

About

- It is the flagship scheme of the Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying, and was launched in 2020.
- Aim: To give momentum to the 'sunrise' fisheries sector through consolidated efforts from various schemes and initiatives.
- The PMMSY is an umbrella scheme with two separate Components namely Central Sector Scheme (CS) and Centrally Sponsored Scheme (CSS).
- The Centrally Sponsored Scheme (CSS) Component is further segregated into Nonbeneficiary oriented and beneficiary orientated subcomponents/activities:
 - Enhancement of Production and Productivity
 - Infrastructure and Post-harvest Management
 - Fisheries Management and Regulatory Framework.

Fisheries Sector of India

- India is the 3rd largest fish producing and 2nd largest aquaculture producing nation in the world.
- India is the 4th largest exporter of fish and fisheries products with a growth in exports of 26.73% in terms of quantity between FY 2021-22 and FY 2022-23.
- Andhra Pradesh is the largest fish producer in the country followed by West Bengal and Gujarat.
- In terms of employment, the sunrise sector supports the livelihood of over 30 Mn people in India.
- The Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying has implemented a flagship scheme "Pradhan Mantri Matsya Sampada Yojana (PMMSY)- to bring about Blue Revolution through sustainable and responsible development of the fisheries sector in India.

Challenges of the Fisheries Sector in India

• **Overfishing:** Overexploitation of fish stocks due to excessive fishing pressure is a significant challenge.

- Illegal, Unreported, and Unregulated (IUU) Fishing: IUU fishing undermines efforts to manage and conserve fish stocks.
 - It includes activities such as fishing without proper authorization, disregarding catch limits, and using banned fishing gear.
- Lack of Infrastructure and Technology: Inadequate infrastructure and outdated fishing technology hinder the efficiency and productivity of the fisheries sector.
 - Poor storage and transportation facilities lead to post-harvest losses, while outdated fishing vessels and gear limit the ability of fishers to catch fish sustainably.
- Poor Fisheries Management: Limited enforcement of regulations, lack of comprehensive data on fish stocks, and inadequate monitoring and control measures exacerbate the problem of overfishing and IUU fishing.
- Pollution and Habitat Destruction: Pollution from industrial activities, coastal development, and agricultural runoff poses a threat to marine and freshwater habitats.
 - Similarly, habitat destruction through activities such as coastal reclamation, mangrove deforestation, and dredging further exacerbates the loss of valuable fish habitats.
- **Climate Change:** Climate change is altering oceanic and freshwater environments, affecting fish distribution, migration patterns, and reproductive cycles.
 - Rising sea temperatures, ocean acidification, and extreme weather events disrupt fish populations and destabilize fisheries ecosystems.
- Socio-economic Issues: Poverty, lack of alternative livelihood options, and unequal distribution of resources contribute to the vulnerability of fishing communities.

Government Initiatives for the Growth of the Sector

- National Fisheries Development Board (NFDB): Established in 2006, NFDB serves as the apex body for the planning and promotion of fisheries development in India.
 - It implements various schemes and programs aimed at enhancing fish production, improving infrastructure, and providing support to fishers and fish farmers.
- Blue Revolution: Launched in 2015, the Blue Revolution aims to promote sustainable development and management of the fisheries sector.



- It focuses on increasing fish production and productivity through the adoption of modern technologies, enhancing infrastructure facilities, promoting entrepreneurship, and strengthening fisheries governance.
- Sagarmala Programme: The Sagarmala Programme, launched in 2015, aims to promote port-led development and unlock the potential of India's maritime sector.
 - It includes initiatives to develop fishing harbors, cold chain infrastructure, and fish processing facilities to support the growth of the fisheries sector.
- National Fisheries Policy: The Government of India formulated the National Fisheries Policy in 2020 to provide a comprehensive framework for the sustainable development of the fisheries sector.
 - The policy focuses on promoting responsible fisheries management, conserving aquatic biodiversity, enhancing fish production, and improving the socio-economic status of fishers and fish farmers.
- Fish Farmers Development Agencies (FFDAs):
 The Government has established FFDAs at the district level to provide technical guidance, training, and extension services to fish farmers.
 - These agencies play a crucial role in disseminating knowledge about modern aquaculture practices, facilitating access to credit and inputs, and promoting entrepreneurship in the fisheries sector.
- Inorder to address the infrastructure requirement for fisheries sector, the union Government during 2018-19 created the Fisheries and Aquaculture Infrastructure Development Fund (FIDF) with a total funds size of Rs 7522.48 crore.
 - In the earlier phase of implementation of FIDF during the period from 2018-19 to 2022-23, a total 121 fisheries infrastructure projects have been approved for creation of various fisheries infrastructures.
- Coastal Aquaculture Authority (CAA): The CAA regulates and promotes coastal aquaculture activities to ensure sustainable development and environmental conservation.
 - It formulates guidelines for shrimp farming, regulates the use of coastalland for a quaculture purposes, and monitors compliance with environmental norms to prevent adverse impacts on coastal ecosystems.

Way Ahead

• The fisheries sector in India holds significant potential for growth and development, given the

country's extensive coastline, numerous rivers, and inland water bodies.

• Measures that can further help the sector:

- Strengthening monitoring and enforcement mechanisms to combat illegal, unreported, and unregulated (IUU) fishing activities.
- Providing financial support and incentives for adopting sustainable practices and modern technologies in fisheries.
- Ensuring the protection and restoration of aquatic habitats such as mangroves, coral reefs, and wetlands, which are crucial for maintaining biodiversity and ecosystem health.
- Strengthening supply chain infrastructure and establishing better market linkages to ensure fair prices for fishers and access to domestic and international markets.

Source: PIB

UN OBSERVES INTERNATIONAL DAY OF SOUTH-SOUTH COOPERATION

In News

The United Nations International Day of South-South Cooperation was observed .

 This year's theme is "A better tomorrow through South-South Cooperation."

About the day

- It is observed annually on September 12, as established by General Assembly resolution 58/220.
- This date commemorates the adoption of the Buenos Aires Plan of Action (BAPA) in 1978, which promotes technical cooperation among developing countries.

South-South cooperation

- It refers to the collaboration among countries in the Global South to address common development challenges, share knowledge, and build collective capacities.
- The concept of cooperation among developing countries originated from the Afro-Asian Conference held in Bandung in 1955.
 - This Conference led to the establishment of the Non-Aligned Movement in 1961 and the creation of the Group of 77 (G-77) in 1964.
 The G-77 mainly promoted South-South Cooperation in the 1960s and 1970s.

Importance and Need

SOUTH-SOUTH COOPERATION (SSC) CAN TAKE ON MANY DIFFERENT FORMS, INCLUDING BUT NOT LIMITED TO:



knowledge-sharing activities, including through research partnerships and technical assistance and capacity development activities;



mobilization of in-kind or cash resources (incl. twinning partnerships);



policy advocacy for achieving zero hunger;



support for collective intra- and interregional action and regional integration;



study tours and peer learning events, including with the support of demonstration sites.

- South-South cooperation involves developing countries collaborating in various domains such as political, economic, and technical areas, either bilaterally, regionally, or interregionally.
- It aims to share knowledge, skills, and resources to achieve development goals. Triangular cooperation, a related modality, includes support from traditional donors and multilateral organizations to facilitate these initiatives.
- The goals of South-South cooperation are to enhance self-reliance, promote collective problem-solving, and support the least developed and most vulnerable countries in their development efforts.
- South-South cooperation is key to achieving SDG 17, which focuses on revitalizing the global partnership for sustainable development.
 - It also supports SDG 11, which aims to make cities inclusive, safe, resilient, and sustainable.

Global Efforts

- The United Nations Office for South-South Cooperation (UNOSSC): It was created in 1974 to promote, coordinate and support South-South and triangular cooperation globally and within the United Nations system.
- The "South-South Galaxy": It is a global knowledge-sharing and partnership platform launched in 2019. The project aims to give systematic and effective support to countries of the South, so they can connect, learn and collaborate with potential partners in the wider digital world.

- South-South and Triangular Cooperation (SSTC): SSTC supports development across sectors like agriculture, health, and education. It fosters mutual benefit, respect, and nonconditional partnerships, contributing to more resilient and sustainable societies.
 - The World Food Programme (WFP) has been actively involved in facilitating SSTC, utilizing mechanisms like the South-South Trust Fund. In 2023, it supported 60 of 85 countries in engaging in SSTC initiatives.

India's Approach

- Principles of global "South-South cooperation" guided India's warm and friendly relations with all African countries.
- India has played a significant role in SSTC through projects like the Pan-African e-Network, India-Brazil-South Africa Fund, and International Solar Alliance (ISA).
 - India has invested about \$107 billion in SSTC since 1947.
- The G20 summit has solidified India as a leading voice for developing nations.
- The inclusion of the African Union in the G20 strengthens India's global position and partnerships.

Issues and Challenges

- SSC does not sufficiently tackle the ongoing effects of colonization and risks promoting neocolonial ideas.
- SSC lacks a strong institutional framework, limiting its efficiency and sustainability.
- SSC does not fully represent India's development cooperation objectives or its role as a significant international player.

Conclusion and Way Forward

- South-South cooperation is a manifestation of solidarity among peoples and countries of the South and it remains important in addressing global challenges such as climate change, conflict, and food insecurity.
- Therefore it is important to strengthen South-South cooperation which requires innovative financing, a demand-driven approach, knowledge sharing, and sustainability in environmental, social, and economic dimensions.
- The active involvement of Southern countries in global governance and development through SSTC reflects a significant shift in international cooperation norms, supporting the 2030 Agenda for sustainable development.

Source: AIR



DELHI DECLARATION ON CIVIL AVIATION

In News

 The Prime Minister has announced the adoption of the Delhi Declaration on Civil Aviation.

About

- The Declaration was adopted unanimously after the 2nd Asia Pacific Ministerial Conference in New Delhi.
- The Declaration is a comprehensive framework aimed at enhancing regional cooperation, addressing emerging challenges and fostering sustainable growth in the civil aviation sector in the Asia-Pacific region.
- The Asia Pacific Ministerial Conference also celebrates 80 years of the International Civil Aviation Organization (ICAO).

Key Announcements

- Prime Minister Narendra Modi emphasized India's advancements in aviation, highlighting that 15% of Indian pilots are women, well above the global average.
- Proposal for an International Buddhist Circuit to enhance regional tourism and connectivity.
- India aims to establish 350-400 airports by 2047, expanding its global aviation footprint.
- The establishment of a Pacific Small Island Developing States Liaison Office to assist smaller nations in managing aviation challenges.
- Initiatives like the 'Ek Ped Ma Ke Naam' campaign to plant 80,000 saplings in commemoration of ICAO's 80 years. Focus on green aviation and sustainability in future plans.

Significance of the Delhi Declaration

- It represents a major step toward strengthening regional cooperation in civil aviation in the Asia-Pacific, a region experiencing rapid aviation growth.
- The framework addresses sustainability, green aviation, and safety—critical challenges in the aviation industry today.
- Initiatives like the International Buddhist Circuit align with broader regional goals of improving connectivity and boosting tourism and economic prosperity across Asia.
- India is positioning itself as a leader in global aviation, with its ambitious targets of building 350-400 airports by 2047, making it a key player in aviation infrastructure development.

Civil Aviation Sector in India

- India is the third-largest domestic aviation market globally, and it is expected to become the thirdlargest overall by 2025.
- India's civil aviation sector is expanding through key government initiatives like the UDAN Scheme, Pradhan Mantri Gati Shakti Plan, and NCAP 2016.
- With 136 operational airports and plans for 100 more, the government focuses on modernizing infrastructure, enhancing regional connectivity, and encouraging PPP models for airport development.

International Civil Aviation Organization (ICAO)

- **Established:** 1947, by the Chicago Convention (1944).
- Headquarters: Montreal, Canada.
- Functions:
 - Ensures safe and efficient international air transport.
 - Sets standards for aviation safety, security, and environmental performance.
 - Promotes regional and international agreements to liberalize aviation markets.
 - Facilitates cooperation and discussions among its 193 member states.
 - Develops legal frameworks for aviation law and standards.

Source: AIR

GROWING CONCERN OF DARK PATTERNS IN INDIA'S DIGITAL LANDSCAPE

Context

 In recent years, as the digital landscape expands, a troubling trend of dark patterns have emerged, manipulating users on websites and apps.

What are dark patterns?

- Dark patterns are deceptive tactics used by online platforms to mislead customers and prevent them from making right choices.
 - By exploiting human psychology and clever design, dark patterns benefit companies at the expense of consumers.
- Common dark patterns include creating a false sense of urgency to rush users into making purchases, hiding subscription cancellations

- deep within websites, and using confusing language to mislead users.
- The tactics are unethical and undermine the integrity of the design process. The practices fall under 'unfair trade practices' category under Consumer Protection Act, 2019.

Dark Patterns menace in India's Digital Landscape

- India's e-commerce market is projected to reach \$350 billion by 2030, driven by rising Internet access, with 936 million Internet subscribers and 350 million active online users.
 - The fierce competition in this space pressures businesses to exploit manipulative tactics to gain an edge.
- Exploitation of User Psychology: Dark patterns take advantage of cognitive biases and emotional triggers, such as fear of missing out (FOMO) or urgency, to manipulate user behavior.
- Lack of Oversight: There is limited regulation around digital design ethics, allowing companies to use manipulative techniques without significant legal repercussions.
- Consumer Vulnerability: With an increasing number of first-time users engaging in digital services, especially in developing markets, there is a knowledge gap that dark patterns exploit.
- **Complex User Interfaces:** Many websites and apps deliberately design complex user interfaces that obscure important information.

Concerns of Drak patterns

- Erosion of Trust: Dark patterns violate the fundamental expectation of honest and transparent interactions between businesses and consumers. Over time, this damages the perceived integrity of digital platforms.
- Damage to Brand Reputation: In the long term, businesses risk severe damage to their reputation and hinder their ability to attract and retain customers.
- Scrutiny and Legal Risks: With increasing attention from regulatory bodies, companies using dark patterns face potential legal consequences.

Initiatives taken by India

The Central Consumer Protection Authority (CCPA)
has notified the Guidelines for Prevention
and Regulation of Dark Patterns, 2023, under
section 18 of the Consumer Protection Act,
2019.

- The guidelines have a list of 13 specified dark patterns. These are: false urgency; basket sneaking; confirm shaming; forced action; subscription trap; interface interference; bait and switch; drip pricing; disguise advertisement; nagging; trick question; Saas billing; and rogue malwares.
- The guidelines will apply to all platforms, systematically offering goods or services in India; advertisers and sellers.
- The Consumer Protection (E-commerce)
 Rules, 2020, prohibits e-commerce entities from indulging in unfair trade practices.
- The Digital Personal Data Protection Act, 2023, states the requirement of free and unambiguous consent of individuals prior to the processing of their personal data.

Global initiatives

- In the European Union, regulations such as the Digital Services Act (DSA), General Data Protection Regulation (GDPR) and the Unfair Commercial Practices Directive (UCPD) address the concerns of Dark patterns.
- In the United States, various States have introduced legislation to combat dark patterns, including the California Privacy Rights Act, the Connecticut Data Privacy Act, and Colorado Privacy Act.

Way Ahead

- Adopting a User-First Approach: To address the issue businesses must prioritize user experience by regularly reviewing and improving their interfaces to eliminate dark patterns. This includes:
 - Ensuring transparency in subscription terms,
 - Providing easy opt-out options and
 - Offering clear and straightforward instructions for canceling services.
- Educating designers and developers on ethical design practices is essential for responsible innovation. This approach encourages the creation of interfaces that are clear and functional.
- Regulatory authorities must step in to protect consumers by setting clear rules around ethical digital practices such as mandatory disclosures, penalties for non-compliance, and regular audits.
- User Advocacy Groups play a vital role in raising awareness about dark patterns by educating consumers about their rights, helping identify and report dark patterns and collaborating with businesses to uphold best practices.

 Technological solutions like browser extensions and plug-ins further empower users by detecting and warning against potential dark patterns, thereby increasing consumer awareness and confidence in safely navigating digital platforms.

Source: TH

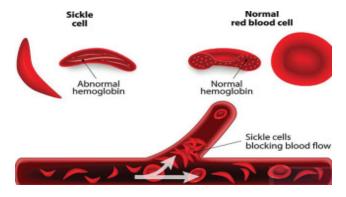
INDIA'S SICKLE CELL ANAEMIA CHALLENGE

Context

 India bears the world's second largest burden of Sickle Cell Anaemia, with over a million people affected by the disease.

What is Sickle Cell Anaemia?

- **Sickle cell disease** is a hereditary disease caused by mutations in one of the genes that encode the hemoglobin protein.
 - If both parents carry the sickle cell trait, the child has significant chances of being born with the disease.
- **Sickle shape of cells:** While healthy individuals have disc-shaped red blood cells, those with sickle cell disease have red blood cells that take on a crescent or sickle-like shape.
- **Impact:** This condition leads to shortened red blood cell survival, and subsequent anemia.
 - Poor blood oxygen levels and blood vessel blockages in people with sickle-cell disease can lead to chronic acute pain syndromes, severe bacterial infections, and necrosis (tissue death).
 - Individuals affected by sickle cell disease are chronically anemic and experience significant damage to their heart, lungs, and kidneys.
- Prevalence: A majority of the patients are concentrated in the tribal belt running across Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, and Maharashtra.
- **Cure:** The only cure comes in the form of gene therapy and stem cell transplants. Both are expensive and still in developmental stages.



Measures taken by government

- In 2023, India launched the National Sickle Cell Anaemia Elimination Mission to eliminate sickle cell disease as a public health problem by 2047.
- Hydroxyurea, a vital medicine for treating sickle cell disease, has been included in the essential medicines list to increase access to it.

National Sickle Cell Anaemia Elimination Mission

- The program aims to improve the care and prospects of all sickle cell disease patients while reducing the prevalence of the disease, particularly among tribal populations of the country.
 - It is executed in a mission mode as part of the National Health Mission (NHM).
- It will be implemented in 17 high-focus states across namely Gujarat, Maharashtra, Rajasthan, Madhya Pradesh, Jharkhand, Chhattisgarh, West Bengal, Odisha, Tamil Nadu, Telangana, Andhra Pradesh, Karnataka, Assam, Uttar Pradesh, Kerala, Bihar, and Uttarakhand.
- Over a period of three years, spanning from the fiscal year 2023-24 to 2025-26, the program targets screening approximately 7.0 crore people.

Challenges

- Only 18% of the people affected by sickle cell disease in India are receiving consistent treatment.
 - This is because patients drop out at all stages of treatment: while getting screened for the disease, while getting diagnosed, while starting treatment, and while trying to adhere to treatment.
- At present, relatively inexpensive drugs such as hydroxyurea are effective for most patients if administered with the right dosage and frequency.
 - However, there are challenges in regular supply of medicines.
- In addition to health issues, patients also suffer from the **social stigma** that is attached to this disease.

Way Ahead

 Reduce Stigma: Raise awareness through targeted media campaigns, drawing from India's experiences with polio and HIV.

- **Expand Screening:** Focus on newborn screening, especially in endemic areas, for early detection.
- Improve Accessibility: Ensure medicines and adherence support are available locally, and establish interdisciplinary centers of excellence for complications.
- Increase Vaccination: Implement catch-up vaccination programs for patients to reduce infections.
- Strengthen Tribal Healthcare: Tailor healthcare delivery to tribal areas and ensure sufficient funding for these regions.

Source: TH

UNIVERSAL BASIC INCOME

Context

• Due to the phenomenon of **jobless growth**, i.e., the rise in output and labour productivity without the commensurate growth in employment generation, several countries have mooted the idea of a **universal basic income (UBI)**.

About

- This idea has gained traction, especially since the International Labour Organization (ILO)'s most recent World Employment and Social Outlooklinks the decrease in jobs growth and the increase in inequality to a surge in automation and the use of artificial intelligence (AI).
- Among the several suggestions on the ways to address this is a UBI.

What is Universal Basic Income (UBI)?

- It is a **social and economic policy** where a government provides all citizens with a regular, unconditional sum of money, regardless of their income, employment status, or other factors.
- The primary goal is to ensure a basic level of financial security for everyone and to reduce poverty and income inequality.
- Key aspects of UBI:
 - Unconditional: Unlike some welfare programs, UBI is given to everyone without conditions.
 - There are no requirements to prove financial need or to work in order to receive the payment.
 - Regular: Payments are made on a regular basis (e.g., monthly) to ensure a steady income flow.
 - Universal: It is provided to all citizens, regardless of their income level or employment status.

 Basic: The amount is typically designed to cover basic living expenses, though the exact amount can vary depending on the country or region implementing it.

Similar Programs in India

- Pradhan Mantri Jan Dhan Yojana (PMJDY):
 Launched in 2014, this scheme aimed to increase financial inclusion by providing access to banking services for all citizens.
 - While not a UBI, PMJDY facilitates the direct transfer of benefits to people's bank accounts, laying the groundwork for broader cash transfer programs.
- Direct Benefit Transfer (DBT): This system
 is used to transfer subsidies for various
 government schemes directly to beneficiaries'
 bank accounts.
 - It's a step towards a more efficient and transparent way of delivering financial aid but is targeted rather than universal.

Arguments in favour of Universal Basic Income in India

- Poverty Alleviation: UBI could significantly reduce poverty by providing a guaranteed income to all citizens, ensuring that even the most vulnerable populations have a basic level of financial security.
- Simplification of Welfare Programs: UBI could streamline and simplify the existing welfare system.
 - Instead of managing multiple targeted schemes with complex eligibility criteria, a universal payment system could be more straightforward and reduce administrative costs and inefficiencies.
- Reduction of Bureaucracy and Corruption:
 Direct cash transfers to all citizens would be
 more transparent and less susceptible to misuse
 compared to targeted subsidy programs.
- Support for Informal Sector Workers: Many people in India work in the informal sector without job security or benefits. UBI could provide a form of social protection for these workers, who are often excluded from traditional welfare schemes.
- Boost to Consumer Spending: By putting money directly into the hands of people, UBI could stimulate consumer spending, which is a key driver of economic growth.
- Improved Public Health and Education: With a basic income, families will be empowered to afford healthcare and education, leading to



improved health outcomes and higher educational attainment, which can contribute to long-term economic development.

Arguments Against Universal Basic Income in India

- **High Cost:** Providing a basic income to all citizens would require a substantial increase in government expenditure, potentially leading to budget deficits or increased taxes.
- Inflation Risks: There's a concern that UBI could lead to inflation. It may also lead to mindless expenditures and add to debt.
- Reduction in Work Incentives: Some argue that a guaranteed income might reduce the incentive for people to work or seek employment, particularly in low-wage jobs.
- Implementation Challenges: Setting up and managing a UBI program in a country as diverse and complex as India could be challenging.
- Equity Concerns: Critics argue that resources could be better allocated to those in greater need, rather than distributing a basic income universally.
- Social and Behavioral Effects: There are concerns about the long-term social and behavioral effects of UBI. Some worry it might undermine traditional values of hard work and self-reliance or impact social cohesion.

Conclusion

- If cash transfers are to be universal, the budgetary costs will be quite high. So, the universal cash transfer scheme is not feasible without raising additional taxes.
- One simple answer to these challenges would be to keep focus on accelerating economic growth and making it more inclusive.

Source: TH

NEWS IN SHORT

THE GREAT STUPA OF SANCHI

Context

 The External Affairs Minister stopped by the replica of the East Gate of Sanchi's Great Stupa standing in front of Humboldt Forum museum in Berlin.

The Great Stupa of Sanchi

 A stupa is a Buddhist commemorative monument usually containing sacred relics of the Buddha or other venerable saints.

- The archetypal stupa is a hemispherical structure, whose origins can be traced to pre-Buddhist burial mounds found in India.
- The Great Stupa of Sanchi was commissioned in the **third century BCE by Emperor Ashoka**.
- It is one of the oldest standing stone structures in India, believed to have been built over the Buddha's relics.
- The stupa is surrounded by a railing and four gateways, each adorned with intricate carvings and sculptures depicting stories from the life of Buddha. The Stupa is a UNESCO World Heritage site
- The main body of the stupa symbolises the cosmic mountain.
 - It is topped by a 'harmika' to hold the triple umbrella, or 'chhatraveli', which represents the three jewels of Buddhism – the Buddha, the Dharma, and the Sangha.



- The most recent construction in Sanchi can be dated to as late as the twelfth century CE.
- While the original stupa itself is a rather plain hemispherical structure crowned by a chhatra (parasol), what makes it instantly recognisable are the ornamental gateways or toranas that stand in front of it.

Source: IE

NANO DAP VS CONVENTIONAL GRANULAR FERTILIZER

Context

 The Government of India is pushing nano DAP as a cost-effective indigenous alternative to the imported granular form of the fertilizer.

What is Nano DAP?

• **Di-ammonium Phosphate (DAP)** is a type of fertilizer that contains phosphorus and nitrogen, two essential nutrients for plant growth.

 Nano DAP, launched by IFFCO in 2023, is a unique liquid fertilizer product that contains nanoparticles of Diammonium Phosphate (DAP).

How is Nano DAP different?

- Nano DAP comes in liquid form. It is logistically easier to manage, and more cost-effective than the granular DAP.
- A 500 ml bottle of nano DAP, which costs Rs 600, is sufficient to cover one acre of land. In comparison, a single 50 kg bag of granular DAP costing Rs 1,350 is needed for one acre of wheat.

Benefits of switching to the nano DAP

- India uses around 10.5-11.5 million tonnes annually, but domestic production is only around 4-5 million tonnes, with the remainder being imported.
 - Nano DAP will **reduce import dependency**.
- The indigenously-produced nano fertilizers are also set to ease India's subsidy burden, which is pegged to be Rs 1.88 lakh crore in FY 2024.

Concerns

 Punjab Agricultural University (PAU) scientists said that their experiments have found that nano DAP use resulted in a substantial decrease in yield of the wheat crop, compared to granular DAP.

Source: IE

GLOBAL NAVIGATION SATELLITE SYSTEM TOLL COLLECTION SYSTEM

In News

 The government is planning to implement a Global Navigation Satellite System (GNSS)based toll collection system starting April 2025

About Global Navigation Satellite System Toll Collection System

- GNSS-based tolling is expected to be implemented by April 2025, aiming to replace the existing FASTag system.
- Vehicles with GNSS equipment will be able to travel up to 20 km for free each day on national highways and expressways.
 - Unlike the fixed tolls of the FASTag system, GNSS will charge based on the actual distance traveled.
- The Ministry of Road Transport and Highways (MoRTH) has amended the National Highways Fee Rules, 2008 to incorporate GNSS-based toll

collection, including the creation of dedicated GNSS lanes.

- Currently, both GNSS and FASTag systems will operate simultaneously, but over time, all lanes will transition to GNSS. Vehicles not equipped with GNSS that use these lanes will face double the toll as a penalty.
- Importance: GNSS lanes will allow vehicles to pass through tolls without stopping, reducing congestion at toll plazas. To use GNSS, vehicles will need a special on-board unit (OBU), which may eventually come factory-installed in new vehicles.

Do you know?

Several GNSS are currently available:

- Galileo (EU)
- GPS (USA)
- GLONASS (Russia)
- BeiDou (China)
- Global Navigation Satellite Systems (GNSS) include constellations of Earth-orbiting satellites that broadcast their locations in space and time, of networks of ground control stations, and of receivers that calculate ground positions by trilateration.
- GNSS are used in all forms of transportation: space stations, aviation, maritime, rail, road and mass transit.

Source:IE

INNER LINE PERMIT

In News

 The Nagaland State Government has approved the implementation of the Inner Line Permit (ILP) in Chumoukedima, Niuland, and Dimapur districts

About Inner Line Permit (ILP)

- The Inner Line Permit (ILP) is an official travel document required for Indian citizens from outside certain protected states to enter these areas for a limited period.
- Established under the Bengal Eastern Frontier Regulations, 1873, initially to protect British commercial interests, the ILP now aims to safeguard tribal cultures in northeastern India.
- The system was updated post-independence to use "Citizen of India" instead of "British subjects."

- There are various types of ILPs, including those for tourism and long-term stays.
 - Tourist ILPs are typically issued routinely.
- The states which require the permit are:
 - Arunachal Pradesh
 - Mizoram
 - Nagaland
 - Manipur

Source: AIR

RETAIL INFLATION

Context

 India's retail inflation in August 2024 has fallen below the RBI's 4% target for the second time in about five years.

About

- The RBI's inflation target is 4% with a tolerance band of +/- 2 percentage points, meaning that the target is within the range of 2% to 6%.
- **Urban inflation fell to 3.14%** in August 2024, compared to 6.59% in August 2023.
- Rural inflation fell to 4.16% in August 2024, compared to 7.02% in August 2023.

Retail Inflation

- Retail inflation refers to the increase in prices of goods and services that consumers purchase, typically measured over a specific period.
- It's often gauged using the Consumer Price Index (CPI), which tracks changes in the cost of a basket of consumer goods and services over time.
- When retail inflation rises, it means that the cost of living is increasing, which can affect household budgets and purchasing power.
- Conversely, low or negative retail inflation can indicate slower economic activity or declining prices.
- To measure inflation, we estimate how much CPI has increased in terms of percentage change over the same period the previous year.
 - If prices have fallen, it is known as **deflation** (negative inflation).
 - The Central Bank (RBI) pays very close attention to this figure in its role of maintaining price stability in the economy.

 Generally, CPI is used as a macroeconomic indicator of inflation, as a tool by the central bank and government for inflation targeting and for inspecting price stability, and as a deflator in the national accounts.

Source: HT

EXERCISE EASTERN BRIDGE VII

Context

 The 7th edition of Exercise Eastern Bridge, between the Royal Oman Air Force and the Indian Air Force, began at Air Force base Masirah, Oman.

About

- The 1st edition of bilateral exercise Eastern Bridge was also held at Oman in 2009.
- Exercise Eastern Bridge VII aims to improve tactical and operational skills, foster mutual understanding and bolster the ability of both air forces to collaborate effectively in diverse scenarios.
- The exercise will include complex aerial maneuvering, air to air and air to ground operations, and logistical coordination, reflecting the evolving defense needs and strategic interests of both nations.

Source: PIB

EXERCISE AL NAJAH

Context

• The 5th edition of India-Oman joint military Exercise AL NAJAH began in Salalah, Oman.

About

- Exercise AL NAJAH has been held biennially since 2015, alternating between India and Oman. Last edition of the same exercise was conducted at Mahaian in Raiasthan.
- Aim of the Joint Exercise is to enhance joint military capability of both sides to undertake counter terrorism operations under Chapter VII of the United Nations Charter.
- Exercise AL NAJAH V will allow both sides to exchange best practices in tactics, techniques and procedures for joint operations.

Source: PIB