

DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min Date: 08-10-2024

Table of Content

Draft National Sports Policy 2024

Prime Minister of India and Maldives President Holds Bilateral Talks

Universal Health Coverage (UHC)

India-UAE High Level Joint Task Force on Investment

Reforms Needed to Boost Recovery Rates of Insolvency and Bankruptcy framework

Need of High-Performance Buildings for Sustainable Future

News In Short

CareEdge assigns BBB+ to India

Dry Port

Small Modular Reactors (SMR)

New Method to Detect Cancer with Ultrasound

ADITI 2.0 and DISC 12 at DefConnect 4.0 Launched

Red Panda

Halari Donkeys

Indian Wild Asses

National Anubhay Awards Scheme, 2025

Fadnavis sworn in as

www.nextias.com

DRAFT NATIONAL SPORTS POLICY 2024

Context

 The ministry of youth affairs and sports has unveiled the draft National Sports Policy 2024 for public feedback.

Key Points of the Policy

- Some of the key features of the NSP are;
 - Implementing physical literacy initiatives,
 - Developing a robust talent identification and development system,
 - To develop sports and physical literacy as major subjects in educational institutions in alignment with National Education Policy 2020.
- A National Sports Education Board to enhance the recognition and attractiveness of sports as a career option will be founded.
- It calls for policies and schemes to actively encourage extensive **participation from the private sector** in sports development.

Need for new policy

- The existing NSP was issued in 2001 and it is imperative to formulate a new NSP that encompasses the latest developments in the field of Sports and presents a roadmap to address the present and future challenges.
- **Limited Infrastructure:** The majority of India's population, especially in rural areas, has minimal access to sports facilities, coaches, and competitive opportunities.
- **Poor Talent Identification:** Unlike countries with strong sports systems like the U.S. or China, India lacks an organized, nationwide talent identification program that scouts and nurtures young athletes.
- Political Interference: Political influence in the functioning of sports bodies leads to favoritism, affecting the merit-based selection of athletes and coaches.
- Cost of Training: Many talented athletes from economically weaker sections find it difficult to afford the high costs of professional training and equipment, leading to early dropouts.

Scheme for Promotion of Sports Culture

 Khelo India Scheme: Launched in 2018, it aims to create a robust sports ecosystem at the grassroots level. It provides financial support for training and development, identifying and nurturing talent across different sports.

- The National Sports Talent Search Scheme (NSTSS) is a program by the Ministry of Youth Affairs and Sports to identify and nurture sports talent in children aged 8–12 years.
- Sports Infrastructure: India now boasts approximately 100 sports facilities that meet international standards.
 - The National Investment Pipeline (NIP) and the National Monetization Pipeline (NMP) are two key initiatives to further enhance sports infrastructure.
- Target Olympic Podium Scheme (TOPS): It was launched in 2014 with a mission to identify, groom, and prepare potential medal prospects for the Olympics, and to elevate India's medal prospects. It includes:
 - Elite Athlete Identification
 - Financial Support.

Way Ahead

- Sporting Culture: Cultivating a sporting culture from an early age is crucial. Schools, colleges, and local communities must actively promote sports beyond academics.
- **Diverse Sports:** Diversifying media coverage and sponsorship to include sports beyond cricket will help build a balanced sports culture.
- Infrastructure Maintenance: Developing infrastructure is essential, but maintaining and upgrading existing facilities is equally important.
- Gender Equality: Ensuring equal access and support for female athletes, along with addressing societal barriers, is vital for improving India's overall sports performance.

Source: HT

PRIME MINISTER OF INDIA AND MALDIVES PRESIDENT HOLDS BILATERAL TALKS

Context

 Prime Minister Narendra Modi and the President of Maldives comprehensively reviewed the bilateral ties.

About

- The Prime Minister underscored the importance of Maldives under its 'Neighbourhood First' Policy and Vision SAGAR, and reaffirmed India's commitment to assist Maldives on its developmental journey and priorities.
- India has extended support of 400 million dollars and a bilateral currency swap of 3,000 crore rupees to the Maldives.



 The support will be instrumental in tackling the ongoing financial challenges faced by the Maldives.

Evolution of India and Maldives Relations

- Early Diplomatic Ties (1965-1978): The Maldives gained independence from the British in 1965, and established diplomatic relations with India.
 - India was one of the first countries to recognize the Maldives as an independent nation.
- Strategic Partnership (1978-1988): The signing of the Maritime Boundary Agreement in 1979 helped define the maritime boundaries between the two countries.
- Political Turbulence (1988-2008): The relationship faced challenges in 1988 when a coup attempt in the Maldives led to the intervention of Indian forces in Operation Cactus.
 - India's military intervention was aimed at thwarting the coup and preserving the Maldives' political stability.
 - This event temporarily strained diplomatic relations but was later resolved.
- Normalization and Economic Cooperation (2008-2013): In 2008, the Maldives experienced a peaceful political transition, and Mohamed Nasheed became the President.
 - The relationship between India and the Maldives improved, focusing on economic cooperation, trade, and people-to-people ties.
 - India provided developmental assistance to the Maldives, particularly in infrastructure projects and capacity building.
- Period of Strain (2013-2018): The relationship faced challenges during the presidency of Abdulla Yameen, with concerns over issues such as democratic backsliding, human rights, and a perceived tilt towards China.
 - The Maldives' growing engagement with China, including infrastructure projects under the **Belt and Road Initiative**, raised strategic concerns for India.
- Renewed Engagement (2018-2023): The election of Ibrahim Mohamed Solih as the President of the Maldives in 2018 marked a shift in bilateral relations. There was a renewed emphasis on strengthening ties with India.
 - The two countries reaffirmed their commitment to democratic values, and India extended financial assistance for various developmental projects.

Significance of Maldives:

- Strategic Importance: The Maldives is strategically located in the Indian Ocean, and its stability and security are of interest to India.
- Trade Route: Situated along crucial maritime trade routes between the Gulf of Aden and the Strait of Malacca, the Maldives acts as a "toll gate" for nearly half of India's external trade and 80% of its energy imports.



 Counterbalancing China: Maldives presents an opportunity for India to counterbalance China's growing influence in the Indian Ocean, fostering regional balance of power.

Brief on India - Maldives

- Participation in Multiple Forums: Both nations are founding members of the South Asian Association for Regional Cooperation (SAARC), the South Asian Economic Union and signatories to the South Asia Free Trade Agreement.
- **Economic partnership:** India emerged as Maldives' 2nd largest trade partner in 2022 & the largest in 2023.
 - India is one of the biggest investors and tourism markets for the Maldives, with significant trade and infrastructure projects underway.
- Defense and Security Cooperation: Since 1988, defence and security has been a major area of cooperation between India and Maldives.
 - A comprehensive Action Plan for Defence was also signed in 2016 to consolidate defence partnership.
 - Estimates suggest that almost 70 per cent of Maldives' defence training is done by India — either on the islands or in India's elite military academies.
- Tourism: In 2023, India is the leading source market for Maldives with a 11.8% market share.

- In March 2022, India & Maldives agreed for an open skies arrangement which will further improve connectivity between two countries.
- Connectivity: The Male to Thilafushi Link project, popularly known as the Greater Male Connectivity Project (GMCP), is a USD 530 million infrastructure project aimed at establishing a direct link between the capital city of the Maldives and Thilafushi, an island located in the South Indian Ocean.

Challenges:

- Domestic turmoil in the Maldives: Recent political upheavals and changes in government create uncertainty and complicate long-term cooperation projects.
- Chinese Influence: China's growing economic presence in the Maldives, evidenced by investments in infrastructure projects and debttrap diplomacy, is perceived as a challenge to India's strategic interests in the region.
 - Chinese naval expansion and potential military ambitions in the Indian Ocean with the active support from Maldives can raise concerns for India.
- Non-traditional threats: Piracy, terrorism, and drug trafficking remain concerns in the region, requiring continuous collaboration and intelligence sharing between India and the Maldives.
- Extremism and radicalization: The Maldives' vulnerability to religious extremism and radicalization poses a security threat that necessitates joint efforts in countering such ideologies.
- **Trade imbalance:** The significant trade imbalance between India and the Maldives leads to resentment and calls for diversifying trade partnerships.

Way Ahead

- The evolution of India-Maldives relations reflects a combination of geopolitical dynamics, changes in leadership, and shared regional interests.
- India is steadfast in its commitments towards Maldives and has always walked the extra mile towards building relations.
- Any impulsive steps to undo the carefully nurtured all encompassing partnership is likely to harm Maldives more than it would India.
- By acknowledging and addressing the challenges, India and the Maldives can navigate the complexities of their relationship and build a stronger, more resilient, and mutually beneficial partnership for the future.

Source: AIR

UNIVERSAL HEALTH COVERAGE (UHC)

Context

 The Union Health Minister said that "India's health system embraces a "whole of government" and "whole of society" approach to achieve Universal Health Coverage (UHC).

What is Universal Health Coverage?

- It means that all people have access to the full range of quality health services without financial hardship.
- Key components of UHC include:
 - Access to Care: Everyone should be able to obtain necessary health services when they need them.
 - **Quality Services:** The care provided should be effective, safe, and of good quality.
 - Financial Protection: Individuals should not face financial difficulties due to medical expenses.
- Achieving UHC is one of the targets the nations of the world set when they adopted the 2030 Sustainable Development Goals (SDGs) in 2015.

UHC in India

- Constitutional Provisions: The Directive Principles of State Policy in Part IV of the Constitution provides a basis for the right to health.
 - Article 39 (e) directs the state to secure the health of workers; Article 42 emphasises just and humane conditions of work and maternity relief; and Article 47 casts a duty on the state to raise the nutrition levels and standard of living, and to improve public health.
 - The Constitution also endows the panchayats and municipalities to strengthen public health under Article 243G.
- India's National Health Policy of 1983 recognized the goal of "Health for All" and emphasized the importance of primary healthcare and equitable distribution of healthcare resources.
- Currently, India aims to attain UHC through the expansion of the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), the flagship publicly financed health insurance (PFHI) scheme of the Union government.

Need of UHC in India

 Out of Pocket Expense: Over 40 percent of healthcare expenses in India are paid out-ofpocket, one of the highest rates worldwide.

- Consequently, these costs push more than 60 million Indians into poverty every year.
- The COVID-19 pandemic has underscored the critical need for robust and universal healthcare systems.
- Lack of Coordination: Although several social health insurance schemes exist nationally and within states, their coordination remains insufficient, leading to partial overlap and underutilisation of their full potential.
- **Preventive Health Services:** UHC emphasizes preventive health services, which can lead to early detection and management of diseases, ultimately reducing the burden of chronic conditions and improving population health.

Government Initiatives

- National Rural Health Mission (NRHM)
 Launched in 2005, was a flagship program of the Indian government aimed at strengthening healthcare in rural areas.
 - The program focused on maternal and child health, immunization, nutrition, and communicable diseases.
- National Health Policy (2017): This policy aims to achieve UHC by providing quality healthcare services to all, with an emphasis on primary healthcare, preventive measures, and strengthening the healthcare infrastructure.
- Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PM-JAY): In 2018, India launched the Ayushman Bharat program, which comprises two components - the Health and Wellness Centers (HWCs) and PM-JAY.
 - PM-JAY is the world's largest governmentfunded health insurance scheme, providing health coverage to over 500 million vulnerable individuals.

Challenges in Adopting UHC in India

- Resource Constraints: India faces significant funding limitations in healthcare, with a low public health expenditure compared to many other countries. This affects the ability to provide comprehensive services.
- Infrastructure Gaps: Many areas, especially rural regions, lack adequate healthcare infrastructure, including hospitals, clinics, and trained personnel, making access to care difficult.
- **Healthcare Workforce Shortages:** There is a shortage of healthcare professionals, particularly in rural areas, leading to disparities in access and quality of care.
- Fragmented Health Systems: India's healthcare system is a mix of public and private providers, leading to inconsistencies in quality and accessibility.

Conclusion

- India has adopted several policies toward improving access to healthcare and has been an enthusiastic signatory to several global health policies to achieve UHC.
 - However, despite these policy commitments, there has been limited success in realizing these goals.
- A healthy population is an empowered population.
 The lighter the disease burden, the better the country's financial health.
- Committing to investing in health systems and effectively implementing UHC necessitates political will, substantial investment, and a clear, long-term vision.
- Establishing a coherent policy pathway to execute the national UHC policy consistently across States is imperative for its success.

Source: AIR

INDIA-UAE HIGH LEVEL JOINT TASK FORCE ON INVESTMENT

In News

 The 12th Meeting of the India-UAE High-Level Joint Task Force on Investments (HLJTFI) took place in Mumbai

About India-UAE High-Level Joint Task Force on Investments (HLJTFI)

- It was established in 2013 to promote trade, investment and economic ties between India and the UAE.
- It has provided an effective mechanism to discuss opportunities and prospects for further investments in India and the UAE, while acting as a forum to resolve issues faced by investors of the two countries.

Latest Developments

- Bilateral Investment Treaty signed during Prime Minister Modi's 2024 UAE visit, it was ratified and entered into force on 31 August 2024.
 - It replaces the previous Bilateral Investment Promotion and Protection Agreement (BIPPA) that expired in September 2024.
 - The treaty aims to protect and encourage bilateral investments by providing investor safeguards while ensuring the state's regulatory authority.
 - The treaty provides protection against expropriation, ensures transparency, and offers compensation for losses.

- It covers portfolio investment, prohibits abusive treatment, and disallows claims involving corruption or fraud.
- Comprehensive Economic Partnership Agreement (CEPA) active since May 2022, CEPA has boosted trade and FDI between the nations, with bilateral non-oil trade reaching \$28.2 billion in H1 2024, a 9.8% YoY increase.
 - Total trade between India and the UAE reached \$84 billion in 2023-24, with a reduced trade deficit of \$12 billion.
 - Non-oil trade increased by 9.8%, and UAE FDI into India tripled, reaching \$3.35 billion.
- Foreign Direct Investment (FDI): UAE is India's fourth-largest investor with \$3.35 billion invested in 2023, a threefold increase on 2022, while Indian FDI in the UAE reached \$2.05 billion.
 - The UAE is India's seventh-largest FDI source, with USD 19 billion invested from April 2000 to June 2024, while Indian investments in the UAE total USD 15.26 billion. The BIT is expected to enhance investor confidence and strengthen economic ties, complementing the existing free trade agreement between the two nations, effective since May 2021.
- Strategic Sectors: Energy, AI, logistics, food, agriculture, and infrastructure have attracted approximately \$100 billion in UAE investments in India.
- GIFT City: The Abu Dhabi Investment Authority (ADIA) will establish a subsidiary in India's GIFT City.
- **Digital Payments:** India and the UAE are working to interlink India's UPI and UAE's AANI systems, facilitating seamless cross-border transactions for over 3 million Indians in the UAE.
- Food Parks in India: The UAE has committed to investing \$2 billion in food parks in India over the next 2-2.5 years. These parks will ensure UAE's food security, raise Indian farmers' incomes, and create jobs. A working group will oversee the development of food corridors.
- Invest India Office: India will open its first "Invest India" office in Dubai, and the UAE will open a similar office in New Delhi.
- Bharat Mart: Expected to be completed by 2026, Bharat Mart will provide Indian companies with world-class logistics. Over 9,000 expressions of interest have been received for 1,400 units.
- **IIFT in Dubai:** The Indian Institute of Foreign Trade (IIFT) will open its first overseas campus in Dubai, with training programs starting by 2025.

- Nuclear cooperation: In September 2024, India and the United Arab Emirates (UAE) signed their first Memorandum of Understanding (MoU) for civil nuclear cooperation.
 - The MoU is part of UAE's broader policy of investing in nuclear energy, and it is tied to a trilateral cooperation framework between India, UAE, and France, launched in 2022 to focus on energy projects, including solar and nuclear.

Challenges

- India has raised concerns over the implementation of the rules of origin under the India-UAE Comprehensive Economic Partnership Agreement (CEPA) for silver, as there was a spurt in its imports following the implementation of the trade pact.
- There are issues related to labor rights for expatriates, geopolitical tensions in the region.

Conclusion and Way Forward

- The India-UAE relationship holds significant potential for growth, driven by both nations' goals of economic diversification and sustainable development.
 - Both sides are discussing obstacles to investments, aiming for timely solutions.
- By leveraging each other's strengths, particularly in emerging sectors like renewable energy, technology, and innovation, they can create a resilient partnership.

Source: PIB

REFORMS NEEDED TO BOOST RECOVERY RATES OF INSOLVENCY AND BANKRUPTCY FRAMEWORK

Context

 The Parliament's Standing Committee on Finance, has flagged concerns and the need to rethink the Insolvency and Bankruptcy Code (IBC) 2016 design.

Insolvency and Bankruptcy Code (IBC) 2016

- IBC was introduced in 2016 to address rising Non Performing Assets and ineffective debt recovery mechanisms in India.
- It aims to overhaul the corporate distress resolution system, replacing debtor-controlled regimes with creditor-in-control mechanisms for time-bound resolutions.
- According to the Insolvency and Bankruptcy Board of India (IBBI) objectives of the IBC resolution are;

- Business Revival: To save businesses through restructuring, changes in ownership, or mergers,
- Maximization of Asset Value: To preserve and maximize the value of the debtor's assets,
- Promoting Entrepreneurship and Credit:
 To encourage entrepreneurship, improve credit availability, and balance the interests of stakeholders, including creditors and debtors.

How has IBC helped improve resolutions?

- As of **March 2024**, the gross NPA (GNPA) ratio of banks stood at Rs 4.8 trillion, or 2.80% of the loans outstanding, at a historical low.
- The share of the number of cases resolved through the resolution plan rose to 38% in FY 2024 from 17% in FY 2018.
- Since the introduction of IBC, India has improved its Ease of Doing Business ranking (basis World Bank report 2020), particularly in 'Resolving Insolvency', from 136 in 2016 to 52 in 2020.

What are the Concerns?

- Procedural Delays: The average resolution time at the National Company Law Tribunal (NCLT) increased to 716 days in FY24. Longer delays correlate with lower recovery rates.
- Steep Haircuts: Cases resolved within 330 days had a 49.2% recovery rate, but this dropped to 26.1% for cases taking over 600 days. These haircuts (reduced recoveries) are a major concern for creditors.
- **Legal Issues:** The Supreme Court in 2022, ruled that the NCLT's 14-day period for admitting cases is not mandatory. This gives the NCLT discretionary powers, slowing down case admissions.
- **Human Resource Crunch:** The NCLT is facing a shortage of personnel. With over 20,000 cases pending annually, the lack of adequate staffing is crippling the system.
- The absence of a clear framework for crossborder insolvency and the unique challenges faced by sectors like real estate, power, and infrastructure further complicate insolvency resolutions under the IBC.
- Countries like the UK, US, and Singapore resolve insolvency cases within a year, while India's IBC cases average over 600 days, highlighting the need for reforms.

Way ahead

 To overcome the challenges within the Insolvency and Bankruptcy Code (IBC), several reforms have been proposed:

- Integrated Technology Platform: Ensuring transparency, consistency, and efficiency in the resolution process.
- **Reforms in NCLT:** Expanding from the current 15 benches, appointing more members, and introducing new tribunals under the Companies Act, 2013.
- Pre-Packaged Insolvency for MSMEs: To expedite resolution for smaller businesses.
- Out-of-Court Settlements: Encouraging settlements to reduce haircuts and court proceedings.
- By addressing challenges such as process delays, overburdened courts, and creditor reluctance towards haircuts, India can bridge the gap with mature frameworks such as those in the advanced economies.

Source: IE

NEED OF HIGH-PERFORMANCE BUILDINGS FOR SUSTAINABLE FUTURE

Context

 Sustainable buildings are key to reducing emissions, energy use, and fossil fuel dependence, helping meet climate targets efficiently.

Energy Consumption Scenario

- Globally, buildings account for nearly 40%
 of total final energy consumption over their
 lifespan, primarily for operational needs such as
 running HVAC systems and lighting.
- This energy use leads to 28% of energy-related carbon emissions arising from both on-site energy consumption and indirect emissions from power plants and other off-site sources.
- According to the Bureau of Energy Efficiency in India, buildings account for more than 30% of the national energy use and 20% of its carbon emissions,

What are High-Performance Buildings (HPBs)?

- High-Performance Buildings (HPBs) are structures designed to achieve maximum efficiency in energy use, water conservation, and occupant comfort, going beyond standard sustainability practices.
 - Their design includes site-specific strategies like natural lighting, ventilation, and sustainable materials to minimize environmental impact.
- They use advanced technologies like energyefficient HVAC systems, smart lighting, and rainwater harvesting.

 HPBs are also equipped with a Building Management System (BMS) to monitor real-time performance, optimizing resource use.

Benefits of High-Performance Buildings (HPBs)

- **Urbanization Solution:** HPBs offer proactive solutions for India's rapid urbanization, driving the country toward a low-carbon, sustainable economy.
- Resilience: In resource-scarce environments like India, HPBs promote resilience by being self-sufficient and adaptive to fluctuating energy markets and rising temperatures.
 - Projects like TCS Banyan Park in Mumbai demonstrate reduced resource consumption through strategic lighting and green space integration.
- Intelligent Systems: Automation and Al allow HPBs to adjust lighting, temperature, and ventilation based on occupancy or weather conditions, creating a personalized and energyefficient environment.
- Cost Efficiency: Over time, HPBs reduce operational costs through energy savings, water conservation, and lower maintenance needs due to smart systems and durable materials.

Challenges of High-Performance Buildings (HPBs)

- High Initial Costs: HPBs lead to higher upfront construction costs, which can be a barrier for many developers.
- Technical Complexity: Designing and managing HPBs requires specialized knowledge and expertise in areas like energy modeling, smart systems integration, and sustainable design strategies.
- Regulatory Hurdles: Varying building codes and local regulations make it difficult to implement HPB standards universally.
- Maintenance and Monitoring: Continuous monitoring through Building Management Systems (BMS) demands skilled personnel and regular upkeep, increasing operational complexity.

Way Ahead

- Incentivize Adoption: Governments can offer tax breaks, subsidies, or low-interest loans to encourage builders and developers to invest in HPBs, offsetting the high initial costs.
- Public-Private Partnerships: Collaboration between governments and private companies will

- help drive the development of HPBs, providing the necessary resources and expertise for largescale projects.
- R&D Investment: Increased investment in research and development for innovative sustainable building materials and energyefficient technologies can make HPBs more affordable and accessible.

Source: TH

NEWS IN SHORT

CAREEDGE ASSIGNS BBB+ TO INDIA

In News

CareEdge Global IFSC Ltd assigned a long-term foreign currency (LTFC) rating of CareEdge BBB+ to India.

• The rating reflects India's resilient post-pandemic recovery and focus on infrastructure investment.

About

- CareEdge has released its inaugural report on sovereign ratings, covering 39 global economies.
- With this, CareEdge became the first Indian credit rating agency to enter the global scale ratings space, including sovereign ratings.

Sovereign credit ratings

- Sovereign credit ratings assess a country's ability to meet its debt obligations.
 - Favorable ratings can enhance a nation's access to global capital markets and attract foreign investment.
- Sovereign credit ratings categorize countries as either investment grade or speculative grade.
 - Speculative grade indicates a higher likelihood of default on borrowings compared to investment grade.

Source: BS

DRY PORT

Context

• Telangana is set to introduce dry port facilities to enhance logistics services for its industries.

What is Dry Port?

- A dry port is an **inland terminal** that is meant to provide connectivity to a sea port by rail or road, thus serving as a trans-shipping hub for sea cargo.
- An exporter can complete all customs formalities at the dry dock, saving time and cost.



 Example: Navi Mumbai Dry Port, connects to the Jawaharlal Nehru Port Trust (JNPT), one of India's largest ports.

Key Features of Dry Ports

- Customs Clearance: Exporters and importers can complete customs procedures at the dry port, reducing congestion at seaports and avoiding delays.
- **Transportation Hub:** Dry ports are linked to seaports through robust transportation systems (rail or road), allowing smooth movement of cargo.
- Cost Efficiency: By using dry ports, companies can reduce transportation costs and optimize logistics by storing goods closer to production or consumption areas.
- **Decongestion of Seaports:** Dry ports reduce the pressure on seaports by handling customs clearance and initial processing inland, thus speeding up operations.

Source: BL

SMALL MODULAR REACTORS (SMR)

Context

 Holtech, an American Company is pitching for fostering a public-private initiative with India to deploy Small Modular Reactors (SMR) based projects.

Small Modular Reactors (SMR)

- These are advanced nuclear reactors that have a power capacity of up to 300 MW(e) per unit, which is about one-third of the generating capacity of traditional nuclear power reactors.
- SMRs, which can produce a large amount of low-carbon electricity, are:
 - **Small** physically a fraction of the size of a conventional nuclear power reactor.
 - Modular making it possible for systems and components to be factory-assembled and transported as a unit to a location for installation.
 - **Reactors** harnessing nuclear fission to generate heat to produce energy.
- Significance: Advanced SMRs offer many advantages, such as relatively small physical footprints, reduced capital investment, ability to be sited in locations not possible for larger nuclear plants, and provisions for incremental power additions.
 - SMRs also offer distinct safeguards, security and nonproliferation advantages.

Source: IE

NEW METHOD TO DETECT CANCER WITH ULTRASOUND

Context

 Scientists have developed a new technique to detect cancers by using ultrasound.

Abou

- The method, using ultrasound, is used to generate high-energy waves which can break off small fragments of tissue from potentially cancerous areas.
 - These fragments, in the form of droplets, are then released into the bloodstream.
- These droplets contain biomolecules such as RNA, DNA, and proteins, which serve as biomarkers, molecules specific to cancer.
- Currently cancer is diagnosed by biopsy, where a small tissue sample is extracted using a needle to confirm the presence and type of cancer through In vitro tests.

What is Ultrasound?

- Ultrasound is a type of sound wave with a frequency higher than the upper limit of human hearing, typically above 20,000 hertz (20 kHz).
- Applications: Ultrasound is commonly used to;
 - Examine the development of a fetus during pregnancy.
 - Diagnose conditions affecting organs like the heart, liver, kidneys, and gallbladder.
 - Monitor blood flow through blood vessels (Doppler ultrasound).

Source: TH

ADITI 2.0 AND DISC 12 AT DEFCONNECT 4.0 LAUNCHED

In News

 Defence Minister Rajnath Singh unveiled two key initiatives: ADITI 2.0 and the 12th edition of Defence India Start-up Challenges (DISC 12) at DefConnect 4.0.

About

- ADITI 2.0:
 - Features 19 challenges focused on Artificial Intelligence (AI), Quantum Technology, military communication, anti-drone systems, and adaptive camouflage.
 - Winners are eligible for grants up to Rs 25 crore to advance defence critical technologies.

- 12th edition of Defence India Start-up Challenges (DISC 12):
 - Introduces 41 challenges in areas like Unmanned Aerial Vehicles (UAVs) and networking.
 - Includes the Medical Innovations and Research Advancement (MIRA) initiative, targeting medical technology advancements for the Armed Forces.
 - Winners can receive grants up to Rs 1.5 crore.
 - This initiative is designed to support startups, MSMEs, and innovators in developing prototypes and commercializing defence products.

Innovations for Defence Excellence (iDEX) Initiative

- **Launched:** iDEX was launched in 2018 as part of the Defence Innovation Organisation (DIO) under the Ministry of Defence.
- Objective: To create an ecosystem that encourages innovation, research, and development in defence and aerospace technologies. It aims to involve start-ups, MSMEs, and individual innovators in defence modernization efforts.
- Support Provided:
 - Funding: Grants and financial assistance for prototype development and commercialization.
 - Mentorship: Incubation support and guidance from defence experts.
 - Testing and Validation: Facilitating access to defence facilities and labs for testing and validation of developed technologies.

Source: PIB

RED PANDA

In News

 The Red Panda Conservation Breeding and Augmentation Programme of the Padmaja Naidu Himalayan Zoological Park (PNHZP), Darjeeling, has been recognized as one of the top three finalists for the 2024 WAZA Conservation & Environmental Sustainability Awards.

About Red Panda (Ailurus fulgens)

- **Habitat:** Temperate forests of the eastern Himalayas, including India, Nepal, Bhutan, Myanmar, and southwestern China.
 - In India, the red panda is primarily found in Sikkim, Arunachal Pradesh, West Bengal (particularly Singalila National Park), and parts of Meghalaya.

- Physical Characteristics: Slightly larger than a domestic cat, with reddish-brown fur, a long, bushy tail, and a waddling gait due to its short front legs.
 - Primarily feeds on bamboo, though it also consumes fruits, berries, and occasionally small mammals and birds.
- Conservation Status: Endangered (IUCN Red List)
- Threats: Habitat loss due to deforestation, agricultural expansion, and human encroachment.
 - Poaching for their fur and as part of illegal pet trade.

Source: PIB

HALARI DONKEYS

In News

 The Halari Donkey, native to the Halar region of Gujarat, is a rare and endangered breed with fewer than 500 individuals remaining.

About Halari Donkeys

- Region: Found mainly in Jamnagar and Dwarka districts of Gujarat's Saurashtra region.
- Appearance: The Halari donkey is white in color, larger, and more resilient than other donkey breeds, making it well-suited to the semi-arid landscape.
- Uses: Traditionally used in building dams, forts, and temples, the donkeys are known for their impressive ability to carry heavy loads of stone and sand.
- Economic Value: Their milk, known for its sweetness, is in high demand, with milk powder fetching upwards of 7,000 per kg in the international market, especially for cosmetic uses.

Source: TH

INDIAN WILD ASSES

In News

The Indian Wild Ass population in Gujarat has increased by 26% over the last five years, reaching a total of 7,672.

 The 10th Wild Ass Population Estimation in 2024 surveyed over 15,500 square kilometers.

About Indian Wild Asses

- It is a subspecies of the Asian Wild Ass (Equus hemionus).
- It inhabits open dry deciduous forests.
- It is solitary and shy animal, present in low densities across its distribution range.



- Description :It is identified by the presence of four horns present only in adult males.
 - It can survive extreme temperatures (45-50 degrees Celsius) in Gujarat's Wild Ass Sanctuary and can run at speeds of 50 to 70 kilometers per hour.
 - The primary food source is grass growing on desert islands.
- **Distribution**: Historically, the species ranged from Southern India to southern Pakistan, Afghanistan, and southeastern Iran.
 - Currently, The majority of the wild ass population resides in six districts of Gujarat:

Surendranagar: 2,705

Kutch: 1,993Patan: 1,615Banaskantha: 710

Morbi: 642Ahmedabad: 7

- Importance: It plays a crucial role in conserving the biodiversity of the area. Its presence helps protect various habitats, benefiting other species like hyenas, wolves, chinkaras, and blackbucks.
- Threats: The harsh climate and dynamic landscape present significant challenges to the survival of the Wild Ass
- Conservation Status: Wild asses, protected under Schedule I of the Wildlife Protection Act and listed as " as Near Threatened " by the International Union for Conservation of Nature.

Source: TH

NATIONAL ANUBHAV AWARDS SCHEME, 2025

In News

 The last date for publishing write-ups on the Anubhav portal is March 31, 2025

About

- The Anubhav online platform was launched in March 2015 by the Department of Pension & Pensioners' Welfare to allow eligible retiring and retired government employees to share their work experiences.
- Annual Awards Scheme established in 2015 to encourage submissions
 - The scheme has seen 10,886 write-ups published, resulting in 59 Anubhav Awards and 19 Jury Certificates awarded across seven ceremonies.

National Anubhav Awards Scheme, 2025:

- This newly notified scheme invites Central Government employees and pensioners to submit their Anubhav write-ups for assessment, with the deadline set for March 31, 2025.
 - **Expanded Eligibility:** For the first time, employees of Central Public Sector Undertakings (CPSUs) and Public Sector Banks can also participate, enhancing the repository of shared experiences.
 - The submission window for pensioners has been extended from one year to three years post-retirement.
 - Assessment Improvements: A new marking system based on various pay levels has been introduced to streamline the assessment process.
 - Additional Resources: Eligible employees and pensioners can find FAQs, submission guidance, selected write-ups, short films about awardees, and citation booklets on the Anubhav Portal.

Source:PIB