NEWSONAS UNIVERSITY TO APRIL, 2024

PMO asks Union Ministry of Commerce to examine Model text of Bilateral Investment Treaty (BIT)

- Exercise assumes significance as only 7 nations have accepted the existing model text, and most of the developed nations have expressed reservations on the text with regard to provisions like resolution of disputes.
- BIT: It is a reciprocal agreement for according protection to investments by nationals and companies of one State in another State.
- Model text of BIT: Union Cabinet adopted new Model BIT text in 2015, which replaced Indian Model BIT, 1993.
- **Key Features of Model BIT 2015:**
 - "Enterprise" based definition of investment.
 - National Treatment: Similar treatment as domestic investors.
 - Protection from expropriation (limiting each country's ability to take over foreign investments in its territory).

History of India's BITs

- Post 1991 economic reforms and up to 2015, India signed BITs with 83 countries (based on Indian Model BIT, 1993).
- Since adoption of Model text of BIT 2015, Notices of Termination of BITs based on 1993 Model were issued to 77 countries (till Sep 2021).
- Recently, India has signed BIT with the UAE in Feb 2024.
- Corporate Social Responsibility (CSR): Voluntary incorporation of internationally recognized standards of CSR by enterprises operating within territory of each Party.
 Settlement of Disputes: Exhaust local remedies before commencing international arbitration.
- Issues with Model BIT 2015: Skewed in favour of the Government's regulatory power, ambiguity in certain areas like duration of the enterprise, arbitrary period of 5 years to exhaust local remedies in dispute resolution, etc.

European Union (EU) and India launched Expression of Interest for Electric Vehicle (EV) Battery Recycling startups

- It took place under India-EU Trade and Technology Council (TTC), first announced by European Commission and India in 2022.
 Established in 2023, TTC is a key forum to deepen strategic partnership on trade and technology.
- India, EU initiative for EV start-ups aims to enhance cooperation between European and Indian Small and Medium-sized Enterprises (SMEs) and start-ups in clean and green technologies sector.

Significance of EV Battery recycling

- Recover non-renewable materials such as lithium, nickel, zinc etc.
- Environmental protection through waste minimization.
- Reduces cost of new batteries by promoting circular economy.
- Battery recycling in India is expected to reach \$300 billion during 2017−2030.

Challenges in EV Battery recycling

- - Around 90% of India's used batteries are either processed by unorganised sector or end up in landfills.
- Lack of Standardised processes and infrastructure.
- Or Complexity of Battery chemistry and flammability pose safety concerns.
- High recycling cost impacts economic viability of recycling unit.

India's Efforts

- Battery Waste Management (Amendment) Rules, 2023
 - Mandatory phase in targets have been set for using recycled material in new battery products to finally achieve 20% by 2030-31, for both Portable and EV batteries.

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Traders smuggle potent Greenhouse Gas (GHG) to Europe: Environmental Investigation Agency (EIA) Investigation

> EIA's report titled 'More Chilling Than Ever' highlighted that illegal trade in HFCs into Europe is fueled by ongoing demand for gases and high profits.

About HFCs

- HFCs are a group of compounds containing carbon, fluorine and hydrogen (unlike hydrochlorofluorocarbons (HCFCs), which also contain chlorine). They are colourless and odourless gases.
- HFCs contribute to 2.3% of global GHG emissions and have an average atmospheric lifetime of 15 years.
- HFCs are entirely human-made. They are primarily produced for use in refrigeration, air-conditioning, insulating foams and aerosol propellants, with minor uses as solvents and for fire protection.
- They were developed as alternatives to chlorofluorocarbons (CFCs) and HCFCs that are being phased-out under Montreal Protocol due to their ozone depletion.

Impact of HFCs trade

- - In 2021, EIA estimated that CO2 equivalency of illegally traded HFCs in European Union could be nearly 30 million tonnes.
- Discourage private sector innovation in developing technologies for new substances with lower Global Warming Potential.
- Efforts taken in India: India is committed to phasing down HFCs in four steps starting from 2032, aligning with Kigali Amendment.

Annual Land Use and Land Cover (LULC) Atlas of India

> Atlas, released by the National Remote Sensing Centre (NRSC), aims to systematically examine land utilization patterns to offer invaluable insights into the evolving dynamics of our environment.

Key highlights of the Atlas

- Agriculture: Over the past 17 years, Kharif and Rabi cropland has expanded by 46.06% and 35.23% respectively, as fallow land diminished by 45.19%.
 - Double/ triple/ annual cropping areas have also increased by 82.22%. (Double/ triple crop land are areas where crops are sown and harvested twice/ thrice in one crop year. Annual crop are perennial and grow throughout year such as sugarcane)
 - Since 2005, shifting cultivation increased until 2016-17, after which it witnessed a decline.
- Water resources: Indicated by minimum water body surface showed an increase by 146 % since 2005.
- Built-up land: Shows an increase with an overall growth of 30.77% since 2005.
 - Built-up area refers to an area with buildings, paved surfaces, commercial and industrial sites, and urban green areas.
 - Wastelands (degraded and unproductive lands) contributed significantly to built-up area expansion by 12.3%.
- Reasons for changes in LULC: Improved availability of farm inputs such as improved irrigation facilities, urbanization and infrastructure development, etc.

Global Measures to reduce HFCs

- Kigali amendment to Montreal Protocol aims to phasedown production and consumption of HFCs.
- F-gas (Fluorinated gases) Regulation by EU in 2014, to phase down HFC.
- > Global Cooling Pledge committed to support robust action through Montreal Protocol Multilateral Fund for early action to reduce HFC consumption.

Hurun Research Institute released the "Global Unicorn Index 2024"

- Global Unicorn Index 2024 is a ranking of the world's start-ups founded in 2000s.
- Key findings
 - ● In 2023, India had 67 unicorn startups (68 in 2022)
 and placed third globally.
 - O USA led with 703 unicorns, followed by China with 340.
 - India lacks unicorns in Aerospace or SpaceTech sector.
- Unicorns are privately held, venture-capital backed startups that have reached a value of \$1 billion. Example, Swiggy, sports platform Dream11 etc.
 - Term was first coined by venture capitalist Aileen Lee in 2013.
- Factors behind decline of Unicorn
 - Slow-down of Start-up ecosystem in India, mainly due to lack of investment into startups.
 - Founders from India produced more offshore unicorns than any other country, co-founding 109 unicorns outside of India.
 - Lack of prudent steps to ensure sustainability of business has led to uncontrolled growth, characterized by rapid depletion of cash reserves.
- Initiatives taken by India to promote start-ups
 - Fund of Funds for Startups Scheme to meet funding needs of startups.
 - Startups incorporated on or after 1st April 2016 can apply for income tax exemption.
 - National Start-up Award to recognize, promote and offer exclusive handholding support to a diverse set of startups.

India's Start-up Ecosystem

- India has 3rd largest startup ecosystem in world.
- 44 Indian startups achieved unicorn status in 2021. >
- From 2015-22, there is 15 times increase in total funding of startups and 9 times increase in number of investors.

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'Geospatial Modeling and Mapping of Soil Erosion in India' study published by IIT-Delhi

- Study provides comprehensive national-scale assessment of soil erosion and sediment yield mapping over India, and to enable the planning and implementation of soil conservation strategies.
- **Soil Erosion** is defined as the accelerated removal of topsoil from land surface through water, wind and tillage.
 - It occurs naturally under all climatic conditions, but it is significantly increased and accelerated by unsustainable human activities through intensive agriculture, deforestation, improper land use changes, etc.

Key findings of the study

- Losses: Yearly potential soil loss for India is calculated at 21 tonnes/ha/yr.
 - >78 million hectares of agricultural land in India experience an average productivity loss of 8%.
- ● Vulnerability hotspots: Brahmaputra basin has the maximum potential soil erosion, followed by the Mahanadi and the Ganga basins.
 - ~5% of geographical area, covering significant portions of Assam, some portions of Meghalaya, and Himachal Pradesh, classified under catastrophic erosion category (potential to damage roads, fences, and even buildings by creating deep gullies).
- Factors for erosion: Rainfall intensity, combined with the topographic factor, demonstrated the highest influence on soil erosion.

Initiatives to address Soil Erosion in India

- Integrated Watershed Management Programme (IWMP): To restore ecological balance by harnessing, conserving, and developing degraded natural resources such as soil, vegetative cover and water.
- Integrated Wasteland Development Programme (IWDP): For improving the productivity of waste & degraded lands.
- Bonn challenge under UNCCD: India to restore 26 million hectares of degraded and deforested land by 2030.
- Concerns due to soil erosion: Reduced productivity due to loss of fertile topsoil, sedimentation of water bodies, increased flooding and landslides, desertification, etc.

Also in News



Doctrine of Harmonious Construction

- While refusing to condone the delay, Supreme Court laid down principles to provide harmonious construction to Sections 3 and 5 of Limitation Act, 1963.
 - Notion of Condonation of delay encompasses discretionary power of a court to extend prescribed time limit for filing an appeal/application.

About Doctrine of Harmonious Construction

- ● It means that in case of conflict between two laws, their interpretation should be in a way in which spirit and essence of both laws are maintained, which is done by 'harmonising' laws.

START Programme

- Gujarat Council on Science and Technology (GUJCOST) designated as nodal centre for ISRO's Space Science and Technology Awareness Training (START) Programme.
- About START
 - ● Offers an introductory-level online training to post- graduate and final-year undergraduate students of physical sciences and technology.

 - Delivered by scientists from Indian academia and ISRO centres.



- > Israel deployed C-Dome defense system for the first time.
- About C-Dome
 - ● It is a naval version of the Iron Dome air defense system used to shield against advanced ballistic, aerial, and surface-to-surface threats.
 - Iron Dome is a missile defense system that can protect deployed and maneuvering forces, as well as civilian areas against a wide range of indirect and aerial threats.

 - Unlike Iron Dome which has its own radar, C-Dome is integrated into the ship's radar to detect incoming targets.



Karen Ethnic Community

- Guerrilla fighters from Myanmar's Karen ethnic minority claimed to be close to seizing control of a major trading town bordering Thailand.
- About Karen Ethnic minority
 - ● Karen people are indigenous to the Thailand-Burma border region in Southeast Asia, primarily in Karen State of Myanmar.
 - They trace their origins to the Gobi Desert, Mongolia, or Tibet.

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TSAT-1A

Tata Advanced Systems Ltd and Satellogic announced successful deployment of TSAT-1A into space.

About TSAT (Tata Satellite) -1A

- € It is India's first indigenously developed and built satellite capable of sub-meter resolution optical imaging.
- It is equipped with both multispectral and hyperspectral imaging capabilities.
- This technology allows TSAT-1A to collect data across
 wide range of wavelengths within electromagnetic spectrum, providing deeper understanding of land, water, and various natural resources.
- Data collected by satellite has potential to drive progress in crucial sectors like Agriculture, Disaster Management, Urban Planning and Environmental Monitorina.



Federation of Indian Chambers of Commerce and Industry (FICCI)

- FICCI celebrates its 97th Foundation Day.
- FICCI
 - Genesis: A non-government, not-for-profit organisation established in 1927.
 - About: FICCI is the largest and oldest apex business organisation in India.
 - ٠ It serves its members from Indian private and public corporate sectors and multinational companies.
 - HQ: New Delhi.
 - Role: FICCI articulates views and concerns of industry, influencing policy to encouraging debate, engaging with policy makers and civil society.
 - Established Committee Against Smuggling and ٠ Counterfeiting Activities Destroying the Economy (CASCADE) Forum in 2011.



Disclosure of assets by Election Candidates

- Supreme Court, while hearing an appeal on election > petition, held that election candidates have right to privacy as regards to matters which are of no concern to voters or are irrelevant to candidature of public life.
- Statutory provisions regarding declarations by Election candidates
 - Section 33 of the Representation of People's Act (RPA), 1951: Deals with nominations for election of candidates and presentation of valid information.
 - € Section 36 of RPA, 1951: Provides for scrutiny of nomination and empowers returning officer to reject nominations on grounds of any defect of 'substantial character'.

Telemedicine

- Study finds that health sector cannot ignore Α Telemedicine's environmental benefits.
- About Telemedicine
 - It involves using Information and Communication Technologies to deliver healthcare services, crucial when distance is a limiting factor.
 - Benefits
 - In India, where healthcare access is limited, it cuts ٠ travel expenses and vehicle emissions in both rural and urban patients.
 - Improves access to care for people with disabilities.
 - Minimizes risk of picking up an infection at doctor's office.
 - Government Steps: eSanjeevani- National Telemedicine Service of India, Tele-MANAS (Mental Health Assistance and Networking Across States) etc.

Personality in News

Mangal Pandey (1827 - 1857)

- Legendary Sepoy Mangal Pandey was remembered on his death anniversary.
- About Mangal Pandey
 - He was a resident of Ballia (Uttar Pradesh).
 - India Company.
- Key Contributions
 - Influenced by example of his compatriots in Behrampur, he refused to use greased cartridges
 - Broke into open mutiny on March 29, 1857, at Barrackpore near Calcutta, which also ignited fire of Revolt of 1857.
- Later, he was court-martialed and hanged at Barrackpore on April 8, 1857.
- Values: Courage, Determination, Patriotism, Leadership, etc.





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