

NEWS TODAY

ISRO'S CHANDRAYAAN-3 LAUNCHED SUCCESSFULLY

- Chandrayaan-3, a **follow-on mission to Chandrayaan-2, was launched using LVM3 (Geosynchronous Satellite Launch Vehicle Mk III).**
 - Chandrayaan-2 was only a partial success, because its lander Vikram, and rover Pragyaan, crashed on Moon's surface.
 - LVM3 is a **three stage** vehicle with **two solid strap-on motors (S200), one liquid core stage (L110)** and a high thrust cryogenic upper stage (C25).
 - It has a carrying capacity of **8 tonnes to Low Earth Orbit** and **4 tonnes to Geosynchronous Transfer Orbit.**
- Objectives:** Demonstrate **Safe and Soft Landing on Lunar Surface;** Demonstrate **rover moving on moon** and to **conduct in-situ scientific experiments.**
 - Data from Chandrayaan-3 will be useful for **future Artemis human landings.**
- Chandrayaan-3 consists of an **indigenous propulsion module, lander module, and a rover** to develop and demonstrate new technologies required for inter-planetary missions. (refer image)
 - Lander and rover will **collect invaluable data for scientific research** on lunar surface for **14 Earth days (a single day on moon).**
 - Successful soft landing will **make India the 4th country, after US, Russia, and China, to achieve the feat.**

Lander Payloads

- RAMBHA-LP Langmuir Probe**
To measure the near surface plasma (ions and electrons) density and its changes with time.
- ChaSTE Chandra's Surface Thermophysical Experiment**
To carry out the measurements of thermal properties of lunar surface near polar region.
- ILSA Instrument for Lunar Seismic Activity**
To measure seismicity around the landing site and delineating the structure of the lunar crust and mantle.

Rover Payloads

- APXS Alpha Particle X-Ray Spectrometer**
To derive the chemical composition and infer mineralogical composition to further enhance our understanding of lunar surface.
- LIBS Laser Induced Breakdown Spectroscopy**
To determine the elemental composition (Mg, Al, Si, K, Ca, Ti, Fe) of lunar soil and rocks around the lunar landing site.
- SHAPE Spectro-polarimetry of HAbitable Planet Earth**
An experimental payload to study the spectro-polarimetric signatures of the habitable planet Earth in the near-infrared (NIR) wavelength range (1-1.7 μm).

JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS (UNAIDS) RELEASED REPORT 'THE PATH THAT ENDS AIDS'

- AIDS (Acquired Immunodeficiency Syndrome)** is a chronic, potentially life-threatening condition caused by the **Human Immunodeficiency Virus (HIV).**
 - HIV weakens a person's immune system** by destroying important cells that fight disease and infection.
- Key highlights of report**
 - AIDS** claimed a life every minute in 2022.
 - About 9.2 million people living with HIV** could not access HIV treatment.
 - 2022 saw the lowest number of new infections** among children globally since 1980s.
- Challenges that hold back HIV response**
 - Women and adolescent girls lack sufficient decision-making power** about their sexual relations, contraceptive use, and healthcare.
 - Lack of Prevention and treatment services in areas** such as sub Saharan, Caribbean, Eastern Europe, etc.
 - Mothers and children** are being left behind as coverage of antiretroviral therapy among pregnant or breastfeeding women living with HIV is around 80% only.
- Step required for successful HIV response**
 - Adapt innovative approaches based on** guidelines, and latest science and technology development.
 - Remove societal and structural inequalities** to HIV-related services and resources.
 - Provide accessible HIV prevention and treatment services** to protect people's well-being.
 - Fully fund resilient, integrated, and accessible** public and community health system.

United Nations Programme on HIV/AIDS (UNAIDS)
Geneva, Switzerland

About : Started operations in 1996. UNAIDS is **leading the global effort to end AIDS as a public health threat by 2030** as part of the Sustainable Development Goals.

UNAIDS Secretariat has offices in 70 countries.



INDIAN PRIME MINISTER ATTENDED NATIONAL DAY OF FRANCE

- France celebrates its **national day on July 14th, also known as Bastille Day.**
- **Bastille Day** is popularly associated with **storming of Bastille in 1789.**
 - It is also the **anniversary of Fête de la Fédération, an event held in 1790 to celebrate the unity of French people.**
 - Bastille Day is often seen as the **symbol of the end of monarchy.**
- **Bastille was a 14th-century fortress prison** in Paris that was used to incarcerate prisoners on King orders **without trial and publicly stating the causes.**
 - **Commander of the Bastille** was killed and the prisoners were released by mob.
- **Significance of storming of Bastille**
 - **First victory of the people of Paris** against a symbol of "Ancient Régime" (Old Regime).
 - Marks the start of **French Revolution which influenced the foundational ideas of democracy** across the world i.e. Liberty, Equality, Fraternity.
 - Louis XVI finally **accorded recognition to the National Assembly** and accepted that his powers would be checked by a constitution.
 - France becomes a **Constitutional Monarchy.**
 - National Assembly completed the draft of constitution in 1791.

GUIDELINES FOR OPERATIONALISATION OF PRODUCTION LINKED INCENTIVE (PLI) SCHEME 2.0 FOR IT HARDWARE APPROVED

- Guidelines have been approved by **Ministry of Electronics and Information Technology (MeitY).**
- PLI scheme, launched in 2020, aims to **make domestic manufacturing globally competitive** and to create global champions in manufacturing.
 - PLI scheme is **available in 14 manufacturing sectors** such as medical devices, food products, textile products, pharmaceuticals, etc.
 - PLI scheme for IT hardware was **first notified in 2021.**
- **PLI 2.0 for IT hardware aims at broadening and deepening the IT hardware manufacturing ecosystem** in country.
 - **Target Segment includes** Laptop, Tablets, All-in-One PCs, Servers, and Ultra Small Form Factor manufactured in India.
 - **Semiconductor design, IC manufacturing, and packaging** are included as incentivized components of PLI 2.0.
- **Key Guidelines**
 - **Base Year:** FY 2022-23 for computation of net incremental sales of manufactured goods.
 - Scheme shall extend an average incentive of around 5% on net incremental sales (over base year).
 - **Eligible Product:** Goods manufactured in India and covered under target segment.
 - **Empowered Group of Secretaries (EGoS)** will monitor the Scheme.
 - **Incentive Period:** 6 years.
 - **Eligibility Criteria for Incentive Claims:** Incentive shall be given on the sales of Target Segment Goods.

DEFENCE ACQUISITION COUNCIL APPROVES ACQUISITION OF 26 RAFALE MARINE FIGHTER JETS, 3 SCORPENE SUBMARINES FROM FRANCE

- 3 additional Scorpene submarines will be **procured under Buy (Indian) category** and will be **built by Mazagon Dock Shipbuilders Limited (MDL)** in Mumbai.
 - MDL is building **six Scorpene class submarines under Project-75. Of these, five have already been commissioned i.e.** Kalvari, Khanderi, Karanj, Vela and Vagir. Sixth submarine (**Vagsheer**) is yet to be commissioned.
- **Scorpene class** uses **diesel electric propulsion** systems, with an **endurance** ability to **operate independently without refuelling** for approximately 50 days.
 - They are capable of **launching a large array of torpedoes and missiles**, and equipped with a range of surveillance and intelligence-gathering mechanisms.
- **Need of additional submarines: Delayed deliveries** of submarines under Project 75; **bolster India's dwindling submarine fleet;** submarines with **higher indigenous content** will create **employment opportunities** etc.
- **Rafale Marine fighters** (naval variant of Rafale fighter jets) **will operate from aircraft carriers on sea.**
 - They will have **foldable wings, longer airframe** for landing on carriers, and a **tail hook for arrested landing on a carrier.**
 - They will **carry a wider range of weapons, including anti-ship missiles and air to surface missiles.**

INDIA EXPORTS DECLINE BY 22% IN JUNE 2023

- This is the steepest monthly decline in exports in **3 years**.
- **Factors behind decline**
 - **Global slowdown** especially in Western markets like the US and Europe and inflationary pressure.
 - **Tightening of Monetary policies by developed countries** as it is affecting manufacturing and businesses.
 - India's **manufacturing sector's performance** struggled to pick up.
- **India's Concern**
 - **Companies looking at a China+1 policy** are moving to competitor countries like **Vietnam**.
 - **Inflation** increases domestic costs of production.
 - **Rupee weakens** despite fall in **Dollar Index**.
 - **US Dollar Index (USDIX)** is a **measure of the value of U.S. dollar** relative to a basket of 6 foreign currencies i.e., Euro, Japanese Yen, British Pound, Canadian Dollar, Swedish Korner, and Swiss Franc.
- **India's initiatives for Export Promotion**
 - **Foreign Trade Policy 2023** is based on 4 pillars i.e., Incentive to Remission, Export promotion through collaboration, Ease of doing business and Emerging Areas.
 - **Trade Infrastructure for Export Scheme (TIES)** provides assistance to Central and State Government agencies for creation of infrastructure for exports growth.
 - **Districts as Export Hubs** for products and services with export potential have been identified in all districts of country.

ALSO IN NEWS



Agriculture Infra Fund Scheme (AIF)

- **Ministry of Agriculture & Farmers Welfare** launched BHARAT Campaign for banks under AIF.
- **AIF** is a financing facility launched in 2020 for **creation of post-harvest management infrastructure and community farm assets**.
 - Duration of the scheme is from FY2020 to FY2029 (10 years).
 - Under it, **Rs. 1 Lakh Crore will be provided by banks and financial institutions as loans with interest subvention of 3% per annum**.
 - **Eligible beneficiaries** include farmers, FPOs, PACS, Marketing Cooperative Societies, SHGs, etc.



Genetic Engineering Appraisal Committee (GEAC)

- **Anti- Genetically-Modified Organism (GMO)** activists have alleged that GEAC is taking decisions without considering State's position.
- GEAC is the **apex biotech regulatory body in India** under **Ministry of Environment, Forests & Climate Change (MoEFCC)**.
 - It has been notified under **Environmental Protection Act, 1986**.
 - GEAC is a **body responsible for appraisal of proposals relating to "release" of GM organisms and products** (ordinarily considered hazardous) into the environment.



Mission Organic Value Chain Development for North Eastern Region (MOVCDNER)

- **MOVCDNER** scheme was launched by **Ministry of Agriculture & Farmers Welfare** during 2015-16.
 - It is a Sub-Mission under **National Mission for Sustainable Agriculture (NMSA)**.
 - It aims to develop **end to end organic value chains in North Eastern States**.
 - It helped in bringing 1.73 lakh ha area under organic farming benefiting 1.89 lakh farmers.
- **Mission components**
 - **Clusters development and formation of Farmer Producer Organizations/ Companies**.
 - **Support for extension services, input facilitation**, training handholding and certification at production stage.
 - **Financial assistance** for setting up of integrated processing units.



Namda Art

- Namda Art is said to have **begun in 16th century** when Mughal Emperor Akbar wanted to get a **covering for his horses** to protect them from the cold.
 - It is believed that a Sufi saint named **Shah-e-Hamdan introduced Kashmiris to the Namda art**.
 - Distinct feature is that **wool is felted and not woven**.
 - Namda works are used in the form of **carpets, rugs, floor mats etc**.

 <p>Nathula Pass</p>	<ul style="list-style-type: none">• Nathu La, one of the highest motorable roads in the world, is a mountain pass in Himalayan peaks that co-joins Sikkim and China.<ul style="list-style-type: none">➤ Situated on Indo-Tibetan border 14450 ft. above sea level.➤ Located on Old Silk Route, Nathu La Pass connects Sikkim to China's Tibet Autonomous Region.➤ Indians require a Protected Area Permit (PAP) to visit Nathula Pass.➤ Border trade via Nathula was reopened in 2006, 44 years after it was closed since the Indo-China war in 1962.	
 <p>Maputo Protocol</p>	<ul style="list-style-type: none">• 2023 marks the 20th anniversary of Protocol to African Charter on Rights of Women in Africa (Maputo Protocol).• Maputo Protocol was adopted by African Union (AU).<ul style="list-style-type: none">➤ It covers a wide range of issues, including political, economic, social, and cultural rights of women.➤ It guarantees women's rights to dignity, equality, and non-discrimination, as well as emphasizes their right to participate in decision-making processes at all level.➤ 44 countries out of 55 AU member states have ratified the protocol.	
 <p>Vector-Borne Diseases (VBDs)</p>	<ul style="list-style-type: none">• Centre had directed state governments and UTs about VBDs control measures ahead of the monsoon season.• VBDs are human illnesses caused by parasites, viruses and bacteria that are transmitted by vectors. These are preventable. For example, malaria, dengue, etc.<ul style="list-style-type: none">➤ A vector is a living organism that transmits an infectious agent from an infected animal to a human or another animal.➤ Directorate of National Vector Borne Disease Control Programme (NVBDCP) is the central nodal agency for prevention and control of VBDs.➤ VBDs account for more than 17% of all infectious diseases. Burden of these diseases is highest in tropical and subtropical areas.	
 <p>Fungal Infections</p>	<ul style="list-style-type: none">• According to recent study, Africa is suffering from a silent epidemic of fungal infections.• Fungal Infections are diseases caused by a fungus (yeast or mold).<ul style="list-style-type: none">➤ Infection by fungus occurs when someone inhales fungal spores. It first leads to development of a lung infection and later a fatal brain infection.➤ Cryptococcal meningitis (infection caused by the fungus) is a leading cause of adult meningitis in sub-Saharan Africa and it's associated with almost 20% of all AIDS-related deaths.➤ Most fungi cannot survive the warm human body temperature of 37°C.	
 <p>Non Fungible Tokens (NFT)</p>	<ul style="list-style-type: none">• Google unveils NFT policy for Play Store to incorporate tokens into games.• NFTs are cryptographic assets which work on a block-chain technology i.e., a distributed public ledger that records transaction.<ul style="list-style-type: none">➤ NFTs are digital assets and could be photos, videos, audio files, or another digital format.➤ Every NFT contains a digital signature which makes each one unique.	
 <p>Trinity of Indian medicine</p>	<ul style="list-style-type: none">• Sushruta Jayanti is celebrated every year on 15th July to honour the legendary Sushruta, hailed as the father of surgery.<ul style="list-style-type: none">➤ Sushruta, Charaka, and Vagbhata are considered to be "The Trinity" of Ayurvedic knowledge and known for writing Sushruta Samhita, Charaka Samhita and Ashtanga Sangraha respectively.• Sushruta Samhita is divided into two part<ul style="list-style-type: none">➤ Purva Tantra gives the signs and symptoms of important surgical diseases, obstetrics, geriatrics, anatomy etc.➤ Uttara tantra gives account of various diseases of ear, eye, head and nose and solutions to complications that may arise out of surgery.	