

SHORTNEWS:

1.MARTIAN METEORITES

Context: Recently a Martian meteorite named **NWA 16788** sold for a record **\$5.3 million** at a **Sotheby's auction**.

About NWA 16788

- The meteorite NWA 16788, weighing **54 pounds (24.5 kg)**, is the **largest known Martian rock** found on Earth.
 - It was discovered in November 2023 by a meteorite hunter in **Niger's Agadez region**, part of the **Sahara Desert**.
- Its **Martian origin was confirmed through lab testing** that matched its chemical signature with known Martian compositions.

What are Martian Meteorites?

- Martian meteorites **are rare space rocks ejected from the surface of Mars** due to asteroid or comet impacts, later landing on Earth after long journeys through space.

Scientific Significance

- **Rare Window into Martian Geology:** Martian meteorites offer direct samples of **Mars' crust**, helping scientists study the planet's composition, geological activity, and volcanic history without launching missions.
- **Tracing Martian Impact History:** The NWA 16788 meteorite is believed to have been ejected from Mars around **5 million years ago**, after a massive asteroid or comet strike.
- **Planetary Journey and Survival:** The meteorite traveled nearly **140 million miles** through space and survived Earth's atmosphere, making it scientifically and statistically extraordinary.
 - Its **preservation and recovery in a desert environment**, rather than the ocean, allowed for its intact discovery and analysis.

2.SASCI SCHEME

Context: Recently, the Government of India launched the **SASCI** scheme for developing selected tourist destinations.

About SASCI Scheme

- The **Special Assistance to States for Capital Investment (SASCI) for Development of Iconic Tourist Centres to Global Scale** was launched in **July 2025**.
- **Nodal Ministry: Ministry of Tourism**

Key Features of SASCI Scheme

- **End-to-End Tourist Experience:** SASCI focuses on strengthening the entire tourism value chain such as **infrastructure, branding, sustainability, service delivery, and operations**.
- **Sustainability and Expertise:** The scheme emphasizes **design quality, sustainable operations, and local stakeholder involvement** for long-term impact
- **Project Selection Criteria:** Project proposals from State Governments were evaluated based on

- Connectivity to the site
- Tourism ecosystem and infrastructure
- Ecological sustainability and carrying capacity
- Potential socio-economic impact
- Project marketing and management models
- **Funding and Timeline:** The Centre will fund projects till March 31, 2026, while state governments will execute and manage the projects.
 - The projects are to be developed and completed **within maximum 2 year's period**
- **Achievement So Far:** As of July 2025, **40 Projects have already been sanctioned** based on state proposals, marking a major step in India's effort to position itself as a global tourism hub.
- For example **100 Cr has been sanctioned for Iconic City Rishikesh to develop Rafting Base Station in Rishikesh, Uttarakhand.**

3. INTERNATIONAL MOON DAY

Context: On July 20, 2025, the world celebrated **International Moon Day** under the theme “**One Moon, One Vision, One Future**”, promoting global unity in lunar exploration.

About International Moon Day

- **Objective:** To mark the **anniversary of the Apollo 11 Moon landing in 1969**, the first human mission to the lunar surface.
- **UN Recognition:** The **UN General Assembly** designated this day in **2021** through Resolution 76/76, based on recommendations from the **Committee on the Peaceful Uses of Outer Space (COPUOS)**.
- **Significance:** The day celebrates **human achievements in lunar exploration**, raises awareness about **peaceful and sustainable use of the Moon**, and promotes **international cooperation** in space activities.

Global Achievements in Moon Exploration

- **Apollo 11 (1969):** First successful manned mission; Neil Armstrong became the first human to walk on the Moon.
- **Lunar Missions by Multiple Nations:** The US, Russia, China, and the EU have conducted robotic and crewed missions, expanding lunar science and technology.
- **Recent Missions:**
 - China's **Chang'e missions** have returned **lunar samples**.
 - NASA's **Artemis programme** aims to **return humans to the Moon**, including the **first woman and person of colour** and to **establish a sustainable human presence** on the Moon.

India's Contributions to Lunar Exploration

- **Chandrayaan-1 (2008):** Discovered **water molecules** on the Moon's surface.
- **Chandrayaan-2 (2019):** Deployed an orbiter still functioning and gathering data.
- **Chandrayaan-3 (2023):** Achieved a **historic soft landing near the lunar south pole**, positioning India among top spacefaring nations.

International Moon Day serves as a reminder of past milestones and inspires future global collaboration for peaceful and sustainable lunar exploration.

About COPUOS

- It is a **United Nations committee established in 1959** to oversee and **promote international cooperation in the peaceful exploration and use of outer space**.
- It serves as a forum for discussing legal and technical issues arising from space activities, ensuring space remains a domain for peaceful purposes.

4.IUCN WORLD CONSERVATION CONGRESS

Context: The IUCN World Conservation Congress 2025 in Abu Dhabi will vote on **whether to ban the use of Synthetic Biology tools in conservation practices**.

About IUCN

- The **International Union for Conservation of Nature (IUCN)** was established in **1948** and is the world's oldest and largest global environmental network.
- **Members:** The IUCN, or International Union for Conservation of Nature, has **over 1,400 member** organizations from over **170 countries**.
 - These members include **government agencies, non-governmental organizations, and Indigenous Peoples' Organizations**.
 - **India** has been a **State Member of IUCN since 1969**.
- **Contributions:** IUCN plays a critical role in global biodiversity conservation through tools like the **Red List of Threatened Species**, scientific research, and policy guidance to governments and institutions.

About IUCN World Conservation Congress

- **Introduction:** The **World Conservation Congress** is IUCN's flagship event held **every four years**, bringing together governments, scientists, NGOs, and communities to shape global conservation policy.
- **2025 Congress:** The **2025 edition**, scheduled for **October in Abu Dhabi**, with the **theme "Powering transformative conservation"**
- **Components of the Congress**
 - **Forum :** Global platform for discussing science, innovation, and conservation policy.
 - **Exhibition :** An interactive space for showcasing research, innovations, and partnerships.
 - **Members' Assembly:** The **highest decision-making body** where member organizations **vote on motions**.

- All motions are **discussed online** for **two months before the Congress**.
- **Once adopted**, motions become **Resolutions and Recommendations**, guiding IUCN's policy and program
- **Focus Areas of 2025 Congress**
 - **Motion 133** proposes a **ban on synthetic biology research** in conservation due to ecological and ethical concerns.
 - **Motion 087** suggests a **case-by-case, policy-driven approach** that balances innovation with precaution.

About Synthetic Biology

- Synthetic biology **involves redesigning organisms by engineering their DNA** to perform new functions. It combines biology, engineering, and computer science.
- **Application in Conservation**
 - Gene-edited algae to protect **coral reefs** from rising temperatures.
 - Genetically modified **mosquitoes** that can't transmit malaria.
 - Engineered **mice** that prevent invasive species from breeding on islands.

5.NISAR SATELLITE SET FOR LAUNCH

Context: ISRO will launch the **NISAR Earth Observation Satellite** soon from **Sriharikota**, Andhra Pradesh in collaboration with NASA.

About the Launch

- **Launch Vehicle and Orbit:** The satellite will be placed into a **743 km Sun-Synchronous Orbit (SSO)** using **Geosynchronous Satellite Launch Vehicle (GSLV-F16)** , a heavy-lift launch vehicle from ISRO.
- **Joint Development and Technology:** NISAR has been **jointly developed by ISRO and NASA**, integrating **NASA's L-band radar** with **ISRO's S-band radar**, and mounted on **NASA's 12-meter unfurlable mesh reflector antenna**.

About NISAR Satellite

- NISAR (**NASA-ISRO Synthetic Aperture Radar**) is the **world's first dual-frequency SAR mission**, using both **L-band** and **S-band** radars to provide **high-resolution, all-weather, day-and-night imaging** of Earth.

Key Features

- **Dual-Band Radar Capability:**
 - **L-band radar (1–2 GHz):** Developed by NASA, penetrates dense forests and vegetation.
 - **S-band radar (2–4 GHz):** Developed by ISRO, offers detailed surface imaging.
- **Large Deployable Antenna:** Equipped with a **12-meter deployable antenna** with an **18-meter radar swath**, enabling wide-area coverage.

- **SweepSAR Technology:** NISAR uses **SweepSAR**, allowing efficient and detailed Earth surface mapping over large areas
 - It will enable NISAR to observe earth with a **swath of 242 km and high spatial resolution** for the first time.

Applications

- **Environmental and Resource Monitoring:** NISAR enables **global scanning every 12 days** to monitor **tectonic activity, glaciers, permafrost, soil moisture, and surface water**, aiding in climate research, agriculture planning, and resource management.
- **Disaster and Ecosystem Management:** The satellite supports **natural disaster tracking, forest monitoring, and biodiversity conservation**, improving disaster preparedness, coastal resilience, and sustainable land-use strategies.

6.WEST BANK

Context: Recently, Israeli settlers attacked the Ein Samiyah spring in the occupied West Bank, threatening the water supply of 110,000 Palestinians.

About the West Bank

- **Location:** The West Bank is a **landlocked territory** located to the **west of the Jordan River**, bordered by **Israel to the west and Jordan to the east**.
 - It includes key **Palestinian cities** like **Ramallah, Hebron, Nablus, and Bethlehem**.
- **Geography:** Mostly composed of north-south-oriented **limestone hills** (**Samarian Hills north of Jerusalem** and the **Judean Hills south of Jerusalem**).
 - The hills **descend eastwardly** to the **low-lying Great Rift Valley of the Jordan River and the Dead Sea**.
- **Water Source:** The **Ein Samiyah spring**, a major water source in the **central West Bank**.
- **Political Status and Dispute:** The West Bank has been under Israeli military occupation since 1967, following the Six-Day War.
 - It is **internationally recognized as occupied Palestinian territory**, though Israel disputes this status and has established numerous settlements there.
- Palestinians seek the West Bank as a **central part of a future independent state**, with **East Jerusalem as its capital**.

7.KASHI DECLARATION FOR DRUG-FREE INDIA

Context: Recently, the **Youth Spiritual Summit in Varanasi**, themed “**Nasha Mukta Yuva for Viksit Bharat**”, concluded with the **Kashi Declaration**.

About Kashi Declaration

- **Organized By:** Ministry of **Youth Affairs and Sports**
- **Time Frame:** Sets a **5 year roadmap** for the De-Addiction Movement.
- **Multi-Ministerial Collaboration:** Involves Ministries of **Youth Affairs, Social Justice, Culture, Labour, and Home Affairs**.

- Including the formation of a **Joint National Committee, annual progress reporting**, and a **national platform for linking** affected individuals to support services.
- **Core Objectives:**
 - To treat **substance abuse** as a **multi-faceted public health and societal challenge**.
 - To **prevent addiction** and **support recovery**.
 - To foster a **national culture of sobriety**.
 - To create “**Nasha Mukh Yuva**” as the foundation for “**Viksit Bharat by 2047**”.
 - To leverage **India’s spiritual capital** as a catalyst for **healing and transformation**.
- **Digital Platform Monitoring:** Targets **online drug sales** and **digital addictions** among school children.
- **Community Outreach:** Promotes **pledge drives, Sunday on Cycle fitness campaign**, and **grassroots awareness** through youth networks.
- **Annual Review Mechanism:** Progress to be assessed via **Viksit Bharat Young Leaders Dialogue (VBYLD) 2026**.
- **Support Services Integration:** A proposed **national digital platform** to connect at-risk individuals with counseling, rehabilitation, and emergency help.

8.DAY ZERO

Context: Kabul is facing a severe water crisis that could make it the **first modern capital city to run dry by 2030**, warns a new report.

What is Day Zero ?

- “Day Zero” refers to the point **when a city or region’s water supply runs dry**, leaving residents without access to tap water.
- It signals **extreme water scarcity**, often caused by **drought, climate change**, and **poor water management**.

Key Factors Behind Kabul’s Water Crisis

- **Rising Demand:** Population surged from under 1 million (2001) to nearly 6 million (2025), overwhelming water resources.
- **Climate Impact:** Severe drought (2021–24) and reduced snowmelt have caused groundwater depletion.
- **Water Contamination:** Up to 80% of groundwater is polluted, leading to health crises and school closures.
- **Weak Infrastructure & Funding Gaps:** Decades of underinvestment, project delays, and frozen international aid since 2021 have crippled water systems.

Notable Examples

- **Cape Town (2018):** Officials warned the city was three months away from running out of water. Dam levels dropped to 13.5%.
- **Chennai (2019):** Faced a severe drought and came close to a Day Zero situation.