

EVERYDAY CURRENT AFFAIRS-AUGUST 21,2023

STATES

- **Union Home Affairs and Cooperation Minister Amit Shah - launched the Garib Kalyan Mahaabhiyan in Bhopal, Madhya Pradesh.**



- ✓ Under the initiative, the BJP plans to brand the achievement of bringing 1.36 crore people of the state out of the poverty line
- ✓ A NITI Aayog report has highlighted that 1.36 crore people came out of the poverty line in Madhya Pradesh between 2019 and 2021, as compared to 2015-16
- ✓ During the event, the Union minister also released the 20-year report card of the BJP government in the state from 2003 to 2023.

CONFERENCES & SUMMITS

- **Prime Minister Narendra Modi - will depart for the 15th Brics summit in Johannesburg on August 22**
- ✓ A meeting of the Brics grouping's business forum and a leaders' retreat were planned on the same day.

- ✓ During the day, the PM will participate in discussions on issues related to economic cooperation, food security and Brics expansion
- ✓ South African President Cyril Ramaphosa, China's Xi Jinping, Brazil's Luiz Lula da Silva and PM Modi will participate in the first in-person Brics summit since 2019
- ✓ Leaders of more than 50 countries are expected to join the summit, with Russian President Vladimir Putin joining the leaders remotely.
- ✓ PM Modi will address the business forum on August 22 where he is expected to underline the significance of Brics against the consequences of the pandemic and the Ukraine war and highlight some of the achievements of his government, including digital transformation and ease of doing business.
- ✓ The leaders' retreat on the first day of the summit will see the PM coming face to face with Xi for the first time since they had a quick conversation on the margins of the G20 summit in Bali last year.
- ✓ With 22 countries lined up for Brics membership, talks will also focus on expansion of the bloc.

SCIENCE, TECHNOLOGY & ENVIRONMENT

- **Luna-25, modern Russia's first attempt to land a spacecraft on the Moon - has ended in failure with the spacecraft crashing onto the lunar surface**
- ✓ The robotic spacecraft, which was designed to study the unexplored world of the Moon for a year, failed even before landing as it suffered glitches during a pre-landing procedure above the lunar surface.
- ✓ Luna-25, according to Russia's Roscosmos space agency, spun into an uncontrolled orbit before crashing into the Moon's surface on August 19.
- ✓ The lunar mission was Russia's first since 1976, when it was part of the Soviet Union
- ✓ The failure once again highlights the risks involved in getting a spacecraft to soft-land on the Moon.
- ✓ The southern polar region of the Moon is believed to hold reserves of ice crystals that could be processed to create water that would be crucial for the survival of astronauts
 - ✓ The evidence of water in this region was found previously by India's Chandrayaan-1 back in 2008.
- ✓ Luna-25, launched by Russian space agency, Roscosmos on August 11, was aiming to be the first mission to reach the moon's south polar region
 - ✓ It was scheduled to attempt a soft landing on Moon on August 21, notably ahead of India's Chandrayaan 3 moon mission on August 23.
 - ✓ The Luna 25 mission aimed to study the composition of the lunar polar regolith (surface material) and the plasma and dust components of the lunar polar exosphere.

- ✓ Interestingly, except the three Chinese landings in the past 10 years, all the successful landings on the Moon happened within a decade between 1966 and 1976.

FAILED MOONSHOT

LUNA-25 was Russia's first moon mission since the Soviet Union's Luna-24 returned with samples from the moon in 1976

Aug 11 | A Soyuz 2.1 rocket carrying the Luna-25 craft blasted off from the Vostochny cosmodrome

Aug 16 | It entered the moon's orbit and was due to attempt a soft landing on Monday

Saturday | Roscosmos said an 'abnormal situation' occurred as mission control tried to move the craft into a pre-landing orbit

DECLINING SPACE POWER?
In 1957, the erstwhile USSR was the first to launch a satellite to orbit the Earth – Sputnik 1, and Soviet cosmonaut Yuri Gagarin became the first man to travel into space in 1961

SPACE MISSIONS DELAYED
Over the past 3 decades, Russia has considered various missions which were delayed or shelved. Oryol, a modern replacement for the Soyuz capsule, is likely to make its maiden flight in 2028. In 2020, Roscosmos had said the maiden flight would take place in 2023. In just 3 years, the launch date has slipped 5 years

TREACHEROUS MISSION
China is the only country to have landed on Moon successfully this century – three times, most recently in Dec 2020. Three other missions have crash-landed in recent years, most recently an attempt by Ispace, a Japanese company. Its Hakuto-R Mission 1 lander crashed in April when a software glitch led the vehicle to misjudge its altitude

WAS IN RACE WITH CHANDRAYAAN-3

- > Both Luna-25 and Indian probe Chandrayaan-3 (started July 14) were on way to Moon's south pole
- > Permanently shadowed polar craters are thought to contain frozen water in rocks that could transform into air & rocket fuel
- > Only three governments have managed successful moon landings so far: the Soviet Union, the US and China

VANITY & GRAFT
Scientists say Russian space programme has been weakened by poor managers keen on unrealistic vanity space projects and corruption. They also blame it on decline in the rigour of post-Soviet scientific education system. Failure of 2011 Fobos-Grunt mission to one of Mars' moons underscored the challenges: It could not even exit earth's orbit and fell back to earth into the Pacific in 2012

WAR & SANCTIONS
Failure comes as Russia's \$2tn economy faces its biggest external challenge for decades: Pressure of both Western sanctions and fighting the biggest land war in Europe since WWII

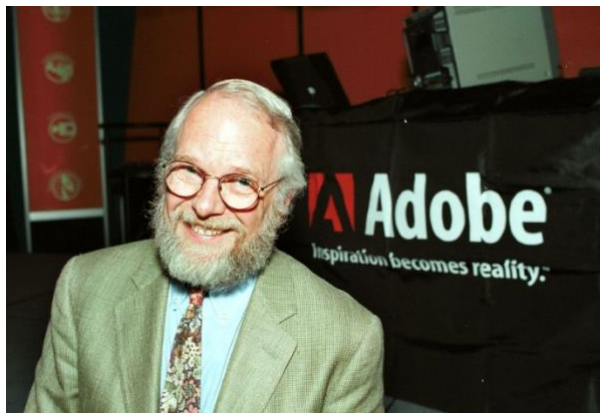
MEDIA DOWNPLAYS
Russian state television put the news of Luna-25 loss at number 8 in its line-up at noon and gave it just 26 seconds of coverage

Diagram Labels: LUNAR TRANSFER TRAJECTORY, Earth-BOUND MANOEUVRES, MOON-BOUND MANOEUVRES, Luna-25 launch, Expected to land

- ✓ Meanwhile, Chandrayaan-3 entered the last lap of its historic journey to Moon, with lander Vikram completing its second and final “deboost” manoeuvre
 - ✓ The process slows down the spacecraft and takes position in a pre-landing orbit of 25x134km for a controlled touchdown at 6.04pm on August 23.
 - ✓ Vikram and Pragyan, the rover, are designed to have a life of one lunar day (14 Earth days) powered by solar energy

OBITUARY

- **Technology entrepreneur John Warnock, co-founder of Adobe Inc., - died on August 19 at age 82**



- ✓ Warnock created the San Jose-based Adobe Inc., in 1982 with Charles Geschke
- ✓ He served as its chief executive officer until 2000 and as chief technical officer until his retirement in 2001.
- ✓ He was also chairman of the board for nearly three decades until 2017, sharing that position with Geschke for most of that time.
- ✓ Warnock remained on the company's board of directors until his death.
- ✓ Geschke died in 2021 at the age of 81.
- ✓ The pair's first product was PostScript, which helped spark the desktop publishing revolution.
- ✓ Warnock held a doctorate in electrical engineering, a master in mathematics and a bachelor in mathematics and philosophy.

SPORTS

- **Spain - beat England by a margin of 1-0 in the final of the Women's World Cup at Accor Stadium in Sydney, Australia on August 20**



- ✓ Spain's Olga Carmona scored the lone goal of the final to give her country their first-ever WWC title.
 - ✓ The left back scored in back-to-back World Cup games for Spain, which has a tournament-best 18 goals in this World Cup
 - ✓ Olga also became just the seventh player in tournament history to score in both the semi-final and final.
 - ✓ Both teams played in their first-ever final and Spain enjoyed 58% of possession and also scored five shots on the goal to England's three
 - ✓ It was the first all-European final since 2003 and gave England a chance to bring a football World Cup home for the first time since 1966 when Bobby Moore's men triumphed on home soil.
 - ✓ With this win, Spain also became only the second nation to clinch both the men's and the women's World Cups after Germany
 - ✓ Spain men's team won their maiden World Cup trophy in 2010
 - ✓ Spain are only the fifth team to win the Women's World Cup title and notably had won only one FIFA match prior to this tournament in Australia and New Zealand.
 - ✓ Meanwhile, Sweden defeated Australia and claimed third spot at the Women's World Cup with a 2-0 win in Brisbane on August 19.
 - ✓ It is the fourth time that Sweden have finished third at the tournament.
 - ✓ Australia's PM Anthony Albanese promised A\$200 million (\$128 million) for women's football following the loss.
- **India's Akhil Sheoran - clinched a bronze medal in 50m rifle 3 positions at the ISSF World shooting championships in Baku, Azerbaijan on August 20**



- ✓ The 28-year-old also secured a 2024 Paris Olympics quota place for India in the event.
- ✓ Akhil Sheoran became the second Indian shooter to win an Olympics quota in men's 50m rifle 3 positions after Swapnil Kushale, who won the first at the Worlds Championships in Cairo last year.
- ✓ Earlier in the day, Sheoran had also combined with Aishwary Pratap Singh Tomar and Niraj Kumar to clinch the men's team gold in men's 50m rifle 3 positions
- ✓ Sheoran has secured the fifth quota for India for the Paris Olympics.

- ✓ Bhowneesh Mendiratta, Rudrankksh Balasaheb Patil, Swapnil Kusale and Mehuli Ghosh are the other four Indians with a quota booked for the Games.
- ✓ The Indian women's 25m pistol team comprising Rhythm Sangwan, Manu Bhaker and Esha Singh also won the team gold in the event
- ✓ India are now second in the medals tally with three gold and three silvers with China leading with seven gold and a total of 13 medals.

CHANDRAYAAN-3 vs LUNA-25 – COMPARISON

