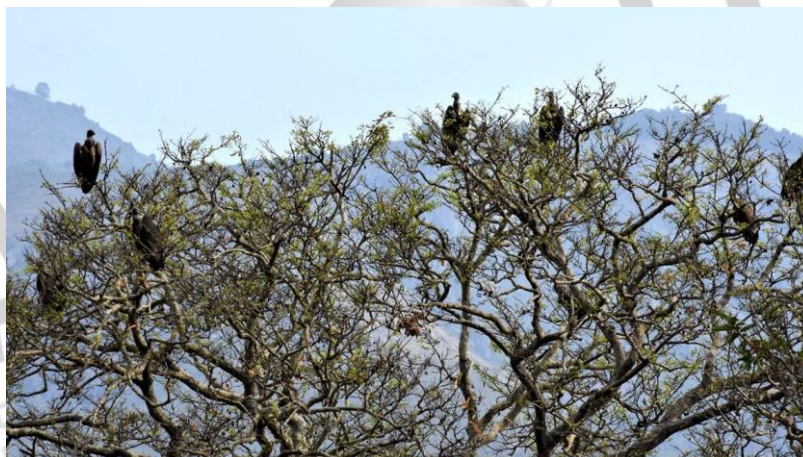


EVERYDAY CURRENT AFFAIRS – FEBRUARY 26, 2023

TAMIL NADU

- A two-day synchronized vulture estimation - was conducted for the first time ever in Mudumalai tiger reserve (MTR) on February 25.



- ✓ The exercise is also being held simultaneously in Sathyamangalam tiger reserve (STR), Bandipur tiger reserve, Nagarahole tiger reserve and Wayanad sanctuary.
- ✓ The forest belt in Nilgiris comprising Theppakadu, Masinagudi, Sigur Plateau, Thengumarahada and adjoining forest areas in Moyar valley leading to STR is the prime abode of vultures.
- ✓ Bandipur tiger reserve and Nagarahole tiger reserve, which are also the main abode of vultures, are considered as the home of the highest population of vultures in the country.
- ✓ MTR has white-backed vultures, long-billed vultures, red-headed vultures and king vultures.
- ✓ There are eight species of vultures in India with the most common being the Indian scavenger, which is found across the country.
- ✓ Among the other species, Indian king and long-billed griffon are labeled as critically endangered vultures.

- **Coonoor-based Pasteur Institute of India - is scheduled to resume mass production of the triple antigen vaccines by December 2023**



- ✓ The lab has the capacity to produce 100 million doses of the triple antigen (diphtheria, pertussis and tetanus) vaccines every year
- ✓ These vaccines will be rolled out for the universal insurance programme of the central government, thereby reducing the buying expenditure substantially
- ✓ Currently, the Centre buys vaccines for the universal vaccination programme mostly from the private sector.
- ✓ The institute had been shut down by the Union health ministry in January 2008 for “poor manufacturing practices” along with three other centrally run vaccine manufacturers including the BCG Vaccine Laboratory in Chennai.
- ✓ At that time, the institute was making anti rabies vaccine and DPT group of vaccines for the country’s immunization of programme
- ✓ The 115-year-institute in Nilgiris has now upgraded itself to Good Manufacturing Practices-compliant laboratory and is awaiting the manufacturing licence from the Central Drugs Standard Control Organisation (CDSCO).
- ✓ The trial batches of the vaccine prepared in the new building were approved by the Union government after passing quality tests at the Central Research Institute in Kasauli.
- ✓ In 2021, the institute sought permission to manufacture Covid-19 vaccines for a private manufacturer, but it wasn’t granted.

STATES

- **On February 24, the Bihar cabinet – approved an allocation of \$50,000 for developing an early warning system for dense fog and cold wave conditions in the state**
- ✓ The state cabinet approved the funding for technical support of the works that will be jointly carried out by the state government and the US National Center for Atmospheric Research (US-NCAR).

- ✓ In this regard, a Memorandum of Understanding will soon be signed between the state government and US-NCAR
- ✓ Early warning systems are main elements of climate change adaptation and disaster risk reduction, which aim to avoid or reduce the damages caused by extreme weather conditions
- ✓ The Bihar Mausam Seva Kendra is developing an app through which early warning for dense fog and cold wave conditions will be provided to the people
- **The Kerala government - launched a robotic scavenger, Bandicoot, to clean sewages in the temple town of Guruvayur**



- ✓ With this, Kerala has become the first state in the country to use robotic technology to clean its commissioned manholes.
- ✓ On February 24, Bandicoot was launched under the Guruvayur Sewerage Project in Thrissur district by the Kerala Water Authority, as part of the 100-day action plan of the state government.
- ✓ The machine has waterproof, HD vision cameras and sensors that can detect harmful gases inside the manholes.
- ✓ The robotic Tron Unit, which is the major component of Bandicoot, enters the manhole and removes sewage using robotic hands, similar to a man's limbs
- ✓ Bandicoot, developed by Kerala-based Genrobotics, had recently won the 'Kerala Pride' award at the Huddle Global 2022 conclave organised by Kerala Startup Mission (KSUM).
- ✓ World's first robotic scavenger 'Bandicoot' seeks to eliminate manual scavenging providing relief for workers engaged in manhole cleaning.

NATIONAL

- **The Food Safety and Standards Authority of India (FSSAI) - has specified a comprehensive group standard for millets, which will be implemented from September 1, 2023**

- ✓ The new standards were specified by the Union Health Ministry under Food Safety and Standards (Food Products Standards and Food Additives) Second Amendment Regulations, 2023.
- ✓ Currently, individual standards exist only for a few millets like sorghum (jowar), whole and decorticated pearl millet grain (bajra), finger millet (ragi) and amaranth under the Food Safety and Standards (Food Product Standards and Food Additives) Regulations, 2011.
- ✓ The FSSAI has now framed a comprehensive group standard for 15 types of millets specifying eight quality parameters to ensure availability of good quality millets in domestic and global markets.
- ✓ The group standard is applicable to the millets like Buckwheat, Kodo Millet, Little Millet, Brown top and Job's tears.
- ✓ Millets are group of small-grained cereal food crops, which are highly tolerant to drought and other extreme weather conditions and require low chemical inputs such as fertilizers and pesticides.



- ✓ Most of the millet crops are native of India and they provide most of the nutrients required for normal functioning of human body.
- ✓ Millets are also gluten-free; low in Glycemic Index (GI); and rich in dietary fibre and micronutrients, including calcium, iron, phosphorus etc.
- ✓ The major millet-producing states are AP, Rajasthan, TN, Gujarat, Karnataka, Haryana, and Telangana

- ✓ In April 2018, millets were rebranded as 'Nutri Cereals' and further as 'Shree Anna' in the recent 2023 budget
- ✓ In order to enhance awareness and promote production and consumption of millets, the year 2018 was designated as the National Year of Millets.
- ✓ Later, the United Nations General Assembly at its 75th session in March 2021 declared 2023 as the International Year of Millets.

INDIA AND OTHER COUNTRIES

- **German Chancellor Olaf Scholz - arrived in New Delhi for a two-day India visit with an objective to expand the overall bilateral ties.**
- ✓ The German leader was received at the airport by Union Minister of State for Finance Pankaj Chaudhary.
- ✓ Prime Minister Narendra Modi received Scholz for a ceremonial welcome at the forecourt of Rashtrapati Bhavan
- ✓ It is Scholz's first visit to India after he became the German chancellor in December 2021, following Angela Merkel's historic 16-year tenure at the top post.
- ✓ This is the first standalone visit by any German Chancellor since the commencement of the Intergovernmental Consultation (IGC) mechanism between the two nations in 2011.



- ✓ PM Modi and Olaf Scholz will hold talks with a focus on boosting bilateral ties in the areas of trade and investment, new technologies, clean energy and defence
- ✓ The Russia-Ukraine conflict and the situation in the Indo-Pacific region are also expected to figure prominently in the deliberations between the leaders
- ✓ Later on the day, PM Narendra Modi and German Chancellor Olaf Scholz held delegation-level talks in Delhi.
- ✓ During the discussion, Scholz invited PM Modi for the G7 summit under the German presidency.
- ✓ This is the fourth time that the two leaders are meeting in the span of a year, underscoring the mutual commitment to growth of the Indo-German partnership
- ✓ Earlier, PM Modi and Scholz held bilateral talks in the Indonesian resort city of Bali on November 16 last year on the sidelines of the G20 summit.

- ✓ The first meeting between the two leaders took place during PM Modi's visit to Berlin on May 2 last year for the sixth India-Germany Inter-Governmental Consultations (IGC).
- ✓ It was followed by PM Modi's visit to the Alpine castle of Schloss Elmau in southern Germany in June to attend the G7 summit.
- ✓ Germany is India's largest trade partner in the European Union and is also among India's top 10 global trade partners along with being one of the largest foreign direct investors in India

SCIENCE, TECHNOLOGY & ENVIRONMENT

- **Rock samples dating back 4.1 billion years and bearing traces of the weather-proof mineral zircon - have been found in Telangana's Chitrial, around 100km north of Hyderabad.**
- ✓ This was observed in a study by researchers from Presidency University, Hiroshima University and National Centre for Earth Science Studies (NCESS)
- ✓ The recent find is expected to provide information on geological events from a dark age when the earth was in its earlier stages.
- ✓ Zircon was one of the first minerals to crystallise when the earth's crust was formed out of molten magma during the Hadean age, according to geologists.
- ✓ It is hard and chemically stable, making it resistant to weathering.
- ✓ The discovery of the Hadean zircon in Telangana indicated that the earth's early history could be found hidden in rocks in India.
- ✓ The only discovery older than the recent one in India was in the tonalitic rocks of Kendujhar district of Odisha in 2018, which was estimated to be more than 4.2 billion years old.

ZIRCON FIND IN INDIA		
Place where discovered	Age in billion yrs	Year of report
Champua, Odisha	4.2+	2018
Chitrial, Telangana	4.1+	2023
Wayanad, Kerala	4+	2016
Baitarani river, Odisha	4+	2018



- ✓ Zircon, a little more than 4 billion years old, had been previously found in Kerala's Wayanad (in 2016) and from the river Baitarani in Odisha (in 2018).
- ✓ The earth's oldest zircon (about 4.4 billion years) was found in Western Australia's Jack Hill.
- ✓ Many other minerals and rocks from that era have perished, but zircon has survived the test of time because of its extreme physical and chemical resilience.

- **Meta, formerly known as Facebook - has announced the release of a new large language model called LLaMA, which stands for Large Language Model Meta AI.**
- ✓ After Microsoft ChatGPT and Google's Bard, the California-based tech major, Meta, has introduced a new research tool that will soon aid in building AI-based chatbots.
- ✓ The new model will be available to researchers and entities affiliated with the government, civil society, and academia under a non-commercial license for now.
- ✓ Large language models are a type of artificial intelligence that can process and understand natural language text.
- ✓ These models have become increasingly popular in recent months, with companies like OpenAI, Microsoft and Google developing some of the largest and most powerful models in the world
- ✓ Meta is making LLaMA available at several sizes (7 billion, 13 billion, 33 billion, and 65 billion parameters).
- ✓ The company claims that LLaMA's 13 billion parameter version can even outperform GPT-3, a predecessor to the model on which ChatGPT is built.
- ✓ Interestingly, this would be Meta's third LLM after Glactica and Blender Bot 3 that were shut down immediately following incorrect results.

DEFENCE

- **An Indian Air Force contingent – has arrived at Al Dhafra airbase of United Arab Emirates to participate in a multi-nation 'Desert Flag-VIII' exercise**



- ✓ The IAF, with 110 personnel, would be participating in the exercise with five LCA Tejas and two C-17 Globemaster III aircraft.
- ✓ **This is the first time when the indigenous LCA Tejas shall participate in an international flying exercise outside India.**
- ✓ The Desert Flag-VIII exercise, to be held from February 27 to March 17, will also witness the participation of air forces of the US, UK, Australia, France, Kuwait, Bahrain, Morocco, Spain and South Korea.
- ✓ The aim of the exercise is to participate in diverse fighter engagements and learn from the best practices of various air forces.

- ✓ India has been in talks with several countries to export LCA Tejas, including Argentina and Egypt
- ✓ India was also hopeful of selling the platform to Malaysia, but the country has signed a \$920 million deal with Korean Aerospace Industries for supply of 18 FA-50 light combat aircraft.
- ✓ The aircraft had earlier participated in air shows at Singapore, Malaysia, Bahrain and Dubai.
- ✓ The LCA Mk 2, which got a cabinet approval last year, has obtained interest from nearly 16 countries

AWARDS

- **SS Rajamouli's 'RRR' - bagged multiple awards at the Hollywood Critics Association Awards in Los Angeles on February 24.**



- ✓ The movie won the Best International Film, Best Action Film, Best Stunts, Best Original Song (for 'Naatu Naatu') and Best Spotlight awards.
- ✓ Team 'RRR' is currently in Los Angeles and will be attending the Oscars on March 12.
- ✓ 'RRR' song 'Naatu Naatu' has been nominated for the Oscars in 'Original Song' category.
- ✓ In January this year, 'Naatu Naatu' won the Golden Globes in the 'Best Original Song' category.
- ✓ Later, 'RRR' bagged two more awards - for Best Song for its track 'Naatu Naatu' and Best Foreign language film - at the 28th edition of the Critics Choice Awards in Los Angeles

