



WEEKLY CURRENT AFFAIRS

APRIL, 2024

Week-4

22-30 April, 2024

★★ Useful for ★★

**CSE, ESE, PSUs, State Services Exams,
SSC and Banking Exams**

22nd APRIL, 2024

World Earth Day

- **Context:** World Earth Day, also known as International Mother Earth Day, is Celebrated annually on April 22.

Key Highlights:

- It is a globally recognised event dedicated to raising awareness and promoting the sustainability of the planet.
- The concept of Earth Day can be traced back to the late 1960s, which saw a surge in public debate over environmental issues.
- It was first celebrated across US college campuses in 1970 — months after a massive oil spill in Santa Barbara. The movement has since mobilised more than a billion individuals in over 192 countries.
- The theme for 2024 is 'Planet vs. Plastics.'
- It highlights the threat plastics pose to the planet and human health, thereby calling an end to all plastic waste by demanding a 60% reduction in the production of plastics by the year 2040.

Dragonfly Rotorcraft mission

- **Context:** NASA has confirmed its Dragonfly rotorcraft mission to Saturn's organic-rich moon Titan.

Key Highlights:

- It is a "dual quadcopter" designed to fly across the surface of Titan, Saturn's largest moon. It is scheduled to reach Titan in 2034.
- This mission will be NASA's first to employ a flying vehicle for scientific exploration on another planetary body.
- The rotorcraft will visit numerous intriguing sites on the moon to study prebiotic chemical processes that are key to understanding both Titan and the early Earth before life began.
- It is equipped with eight rotors and the rotorcraft operates similarly to a large drone.
- It will be powered by a radioisotope power system, similar to the one used by the Curiosity rover on Mars.

- It will spend most of its time on the moon's surface making science measurements.
- All flights, data transmissions, and the majority of scientific operations will occur during Titan's daytime, which will allow ample time for recharging during the moon's nighttime periods.

Global Alliance for Incinerator Alternatives (GAIA) Asia Pacific

- **Context:** The Global Alliance for Incinerator Alternatives (GAIA) Asia Pacific has called on the ASEAN to take decisive action in response to plastic pollution.

Key Highlights:

- This is a global network of over 1,000 grassroots groups, non-profits, and individuals.
- It aims to power a transition away from our current linear and extractive economy and towards a circular system which supports people's right to a safe and healthy environment.
- Their vision is a fair, zero-waste world that honors ecological boundaries and community rights, ensuring people are not harmed by toxic pollution and that resources are conserved responsibly rather than discarded or incinerated.
- Their efforts include combating pollution and promoting regenerative practices in urban areas through local advocacy, policy and financial changes, research, public communication, and coalition-building.
- They focus on four main areas: stopping incineration, achieving zero waste, reducing plastic use, and tackling climate issues.

23rd APRIL, 2024

Meta Llama 3

- **Context:** Meta Platforms, the parent company of Facebook, Instagram, and WhatsApp, has introduced its most capable Large Language Model (LLM), the Meta Llama 3.

Key Highlights:

- It stands for Large Language Model Meta AI. This is a family of LLMs introduced by Meta AI in February 2023.
- The first version of the model was released in four sizes — 7B, 13B, 33B, and 65 billion parameters. According to reports, the 13B model of Llama performed better than OpenAI's GPT-3, despite GPT-3 having 135 billion parameters.
- It's said to be the most advanced model, showing big improvements in performance and AI abilities.
- It is based on the Llama 2 architecture which has been released in two sizes, 8B and 70B parameters. Both sizes include a base model and a fine-tuned version that is specifically designed to improve performance on certain tasks.
- The instruction-tuned version is made for enhancing AI chatbots that are designed to engage in conversations with users.
- All Llama 3 models handle context lengths of up to 8,000 tokens. Having more tokens means users can input more content or prompts, and the model can respond with more content. This enables more interactions and better handling of complex inputs compared to Llama 2 or 1.
- At present, Meta AI is available in English across the US on WhatsApp.
- It can be used on Facebook, Instagram, WhatsApp, Messenger, and the web. It's easily accessible for developers since Meta has integrated the LLM into the Hugging Face ecosystem.
- It has the ability to engage in conversations and respond to posts directly on the Facebook feed.

SC: Forests as a national asset

- **Context:** Recently, in a judgement the Supreme Court has asserted that forests in India are a national asset and a major contributor to the nation's financial wealth.

Key Highlights:

- This judgment is particularly relevant given the ongoing controversy surrounding the Forest Conservation (Amendment) Act of 2023 (FCAA)

- Highlighting the role of forest, the court held that concepts of carbon credit and green accounting to evaluate a nation's wealth had become a reality.
- A country with surplus forest cover can sell its additional carbon credits to those lacking in forests. This underlines the significance of forests in contributing to the financial wealth of a country.
- The judgment said India's forests serve as a major sink of carbon dioxide (CO₂).
- The value of mitigation has put a conservative value of \$5 per tonne of CO₂ locked in our forests, this huge sink of about 24,000 mt of CO₂ is worth \$120 billion, or 6 lakh crores.

B-READY Index

- **Context:** India's preparation for the new World Bank Index Business Ready (B-READY), replacing the defunct Ease of Doing Business (EoDB) Index.

Key Highlights:

- The B-READY Index is a new metric designed by the World Bank to assess business environments, set to launch in September 2025.
- It aims to replace the now-defunct Ease of Doing Business Index and plans to cover 180 economies.
- This index focuses on broader qualitative assessments, including regulatory quality and environmental considerations.
- India is gearing up for the B-READY Index through proactive steps taken by the Department for Promotion of Industry and Internal Trade (DPIT).
- DPIT is conducting bi-monthly meetings with nodal ministries to evaluate responses to over 1,300 questions from the B-READY questionnaire.
- These meetings aim to assess and enhance India's position in terms of business readiness and attractiveness for foreign investments.

24th APRIL, 2024

Exercise Poorvi Lehar

- **Context:** The Indian Navy carried out Exercise Poorvi Lehar on the East Coast under the operational command of the Flag Officer Commanding-in-Chief, Eastern Naval Command.

Key Highlights:

- It is a maritime exercise conducted by the Indian Navy along the East Coast, under the operational direction of the Flag Officer Commanding-in-Chief, Eastern Naval Command.
- The exercise is aimed at assessing the ability of the Indian Navy to handle maritime security challenges in the region by testing its procedures.
- The exercise witnessed participation of Ships, Submarines, Aircraft and Special Forces.
- The exercise had different stages. In one part, there was combat training in a realistic scenario, and in another, they successfully fired various weapons to show the Indian Navy's ability to hit targets accurately.
- Apart from assets from the Eastern Naval Command, the exercise also included assets from the Indian Air Force, Andaman & Nicobar Command, and Coast Guard. This demonstrated a high degree of interoperability amongst the Services
- It provided important lessons to the participating forces. This has helped them to prepare themselves in a better way to respond effectively to real maritime challenges in the region.
- It has helped in maintaining continuous Maritime Domain Awareness throughout the Area of operations by using aircraft from diverse locations.

ILO: Workers exposed to Climate Change risks

- **Context:** As per the report of International Labour Organization (ILO), over 70% of workers worldwide face climate change risks, leading to hundreds of thousands of deaths yearly.

Key Highlights:

- ILO in its report titled "Ensuring safety and health at work in a changing climate" observed that many workers are already facing climate change risks at work, and these numbers may increase in the future.
- There is a need to review current laws or make new rules and advice in the backdrop of rising number of natural hazards due to climate change.
- The number of workers facing rising temperatures has increased by about 5% in the last 20 years to 70.9%, the report found. It also mentioned other climate risks, like UV radiation and air pollution, affecting around 1.6 billion people each.
- Air pollution leads to about 860,000 work-related deaths yearly for outdoor workers. Excessive heat causes around 18,970 occupational deaths annually, while UV radiation causes roughly 18,960 deaths due to non-melanoma skin cancer.
- The report mentions that technologies aimed at combating climate change, such as solar panels and lithium-ion batteries for electric vehicles, can sometimes pose new risks because they contain harmful chemicals.
- The report highlighted that the working poor, those in informal jobs, seasonal workers, and employees of small businesses will be the most affected by these changes.

National Panchayati Raj Day

- **Context:** Every year, National Panchayati Raj Day is celebrated on April 24.

Key Highlights:

- In the early 1950s, the first National Development Council recommended the formation of a democratic system of governance at the grassroots level.
- In 1993, by the 73rd Constitutional Amendment Act, the Panchayat system came to be implemented in the rural areas to allow for development to happen at grassroots level.

- **There are three levels: Gram Panchayat:** This is the village council, the most basic level. **Block Panchayat:** This council looks after a group of villages. **Zila Panchayat:** This is the district council, overseeing a larger area.
- Panchayati Raj is important because it brings democracy down to the village level.
- People who understand the local needs and challenges can make decisions about things like: Building roads and schools, Providing clean water and sanitation and Managing healthcare facilities
- The Ministry of Panchayati Raj is organizing a National Colloquium on – Governance at the Grassroots after Three Decades of the 73rd Constitutional Amendment – on 24th April, 2024, at Vigyan Bhawan, in observance of National Panchayati Raj Day.

25th APRIL, 2024

State of the Climate in Asia 2023 report

- **Context:** The World Meteorological Organization has recently published the 'State of the Climate in Asia 2023' report.

Key Highlights:

- Asia has faced the most number of disasters in the world in 2023. There have been recorded instances of 79 events associated with extreme weather, climate, and water-related hazards. These events have affected over nine million people in the region and directly resulted in the loss of over 2,000 lives.
- The majority of disasters which have occurred in Asia are related to flooding and storms. Over 60% of the 2,000 deaths have been associated with flooding and more than 15% of the deaths were linked to storms.
- Asia has warmed faster than the global average. This warming trend has nearly doubled since the 1961-1990 period.
- Deterioration of climate change indicators, such as rise in surface temperatures, glacier retreat, and sea level rise, will have significant consequences for Asia's economy, ecosystems, and human lives.

Biomarkers

- **Context:** For the potential detection of cancer in its earlier stages, screening of blood biomarkers is being suggested as a possible method by researchers.

Key Highlights:

- According to the researchers, a new AI-powered test can be used to accurately and quickly detect three major types of cancer, by using only a single spot of dried blood. This dried blood spot can serve as a biomarker for cancer detection.
- According to WHO, Biomarker is defined as any measurement which reflects an interaction between a biological system and a potential hazard. This potential hazard may be chemical, physical, or biological. The measured response is measured in functional, physiological or biochemical terms.
- It is an objective measurement that captures what is happening in a cell or an organism at a given moment. It is often referred to as molecular markers or signature molecules.
- Biomarkers consist of biomolecules like carbohydrates, proteins, lipids, genes, DNA, RNA, platelets, enzymes, and hormones.
- Biomarkers play a crucial role in disease diagnosis, appropriate drug prescription, dosage determination, and drug development.

Asset Reconstruction Companies (ARCs)

- **Context:** The Reserve Bank of India (RBI) released a 'Master Direction' for Asset Reconstruction Companies (ARCs).

Key Highlights:

- According to the directions, to commence the business of securitisation or asset reconstruction, an ARC is required to have a minimum net owned fund (NOF) of Rs 300 crore and thereafter, on an ongoing basis.
- An ARC shall apply for registration and obtain a certificate of registration (CoR) from the RBI, before commencing the business.

- No ARC shall invest in land or building, except for investment for its own use up to 10% of its owned funds.
- ARCs are prohibited from raising money by way of deposit. They are also mandated to maintain a capital adequacy ratio of a minimum of 15% of its total risk-weighted assets.
- In the Union Budget 2021-22, the Finance Minister announced the setting up of Asset Reconstruction Companies in India to take care of Non-Performing Assets (NPAs) of stressed banks.
- It is a financial institution that buys the NPA or bad assets from banks and financial institutions so that the latter can clean up their balance sheets.
- ARCs in India have been set up by state-owned and private-sector banks. Also, there is no equity contribution from the government.
- ARCs play a critical role in the resolution of stressed financial assets of banks and financial institutions, thereby enhancing the overall health of the financial system.
- Such solar activity is likely an indication of the Sun reaching the peak of its 11-year solar cycle known as solar maximum. The peak is marked by increased solar events like flares and CMEs.
- This is the third sympathetic solar flare this year, following a pair of explosions in January and a duo of X-class flares in March.
- If directed towards the Earth, they have the potential to disrupt power grids, telecommunication networks and orbiting satellites and expose astronauts to dangerous doses of radiation.

Global Report on Food Crises 2024 (GRFC)

- **Context:** According to the 2024 Global Report on Food Crisis (GRFC), nearly 282 million people faced high levels of acute food insecurity in 59 countries in 2023.

Key Highlights:

- The Global Report on Food Crises (GRFC) 2024 is published annually by the Food Security Information Network (FSIN).
- It is launched by the Global Network Against Food Crises which is a collaboration involving United Nations agencies, the European Union, the United States Agency for International Development, and non-governmental organizations working to address food crises.
- The report examined a population of 1.3 billion across 59 countries in 2023.
- For the fifth consecutive year, the number of people experiencing acute food insecurity increased. This means they faced severe food shortages that threatened their lives or livelihoods, regardless of the causes or duration.
- Nearly 282 million people in 59 countries suffered from high levels of acute food insecurity in 2023.
- Conflicts, extreme weather events, and economic shocks were identified as the main drivers worsening food crises worldwide.
- Conflict and insecurity were the primary causes in 20 countries which is directly impacting 135 million people, notably in places like the Gaza Strip and Sudan.

26th APRIL, 2024

Sympathetic Solar Flare

- **Context:** Four solar flares erupt simultaneously in a rare celestial event.

Key Highlights:

- The sight of “sympathetic solar flares” in different regions of the star was captured by NASA’s Solar Dynamics Observatory, showing complex magnetic interactions.
- The concurrent blasts were part of one single eruption, known as a sympathetic solar flare.
- Sympathetic flares are caused by multiple eruptions across the Sun’s magnetic field, linked by massive magnetic field loops that lie above the solar surface.
- When one spot detonates, others follow suit. This leads to coronal mass ejections (CMEs) and massive bursts of plasma.

- The Gaza Strip faced the most severe food crisis in the past eight years while Sudan also experienced a significant crisis, with almost a third of its population requiring emergency food assistance.
- Extreme weather events affected 18 countries, with over 72 million people experiencing high levels of acute food insecurity.
- The ten countries with the most severe food crises in 2023 were the Democratic Republic of the Congo, Nigeria, Sudan, Afghanistan, Ethiopia, Yemen, the Syrian Arab Republic, Bangladesh, Pakistan, and Myanmar.
- There were positive developments in 17 countries in 2023, including the Democratic Republic of Congo and Ukraine, where the food situation improved.
- Non-bank PoS providers must notify RBI within 60 days and submit authorization applications by May 31, 2025.
- Banks must close accounts for non-bank payment aggregators by October 31, 2025, unless authorized.
- Net-worth requirements for PAs facilitating face-to-face transactions have been changed. PAs net worth requirements will be increased to Rs 25 crore by March 2028.
- Medium merchants, defined as physical or online merchants with annual business turnover of less than 40 lakhs who are not registered under the GST, would also have to undergo contact point verification.
- PAs have to bolster risk management with KYC norms, tailored for small and medium-sized merchants.
- PAs can now use escrow accounts for both PA-O and PA-P activities, including goods delivery. All PAs must join the FIU to report suspicious transactions.
- Starting August 1, 2025, only card issuers and networks can store card data for face-to-face transactions.

27th APRIL, 2024

RBI guidelines for payment aggregators

- **Context:** The Reserve Bank of India is proposing new regulations for offline payment aggregators (PAs) to enhance safety.

Key Highlights:

- Payment Aggregators (PAs) are entities responsible for enlisting merchants and streamlining the process of collecting payments from customers for the purchase of goods and services. These aggregators unburden the merchants from creating a payment integration system of their own.
- PAs utilize various payment channels like online QR codes or physical point-of-sale (POS) machines to collect payments on behalf of the merchants. Subsequently, PAs settle the accumulated funds with the respective merchants.
- Two major types of PAs are a part of the payments ecosystem in the country: This includes PA-Online Point of Sale (PA-O) and PA – Physical Point of Sale (PA-P).
- The revised definition of payment aggregators has been modified to include physical point-of-sale payment providers such as Innoviti Payments, Pine Labs, and MSwipe. Thus they have been subjected to regulatory oversight.

ASEAN Future Forum 2024

- **Context:** India's External Affairs Minister took part in the First ASEAN Future Forum 2024.

Key Highlights:

- It is a platform for ASEAN and its partners to share new ideas and policy recommendations.
- This forum aims to be an annual multi-stakeholder, track 1.5 dialogue platform for open and constructive discussions about the future of ASEAN.
- Its mission focuses on shaping a resilient, inclusive, and future-oriented ASEAN. This involves effectively adapting to the changing regional and global environment, while upholding core values and addressing the needs of its Member States.
- Significance of the forum: Critical questions about ASEAN's future relevance and centrality are addressed through this forum.
- It is to explore innovative ideas and practical steps to ensure ASEAN's continued success in promoting peace, security, and development in the region.

28th APRIL, 2024

Crystal Maze 2 missile

- **Context:** The Indian Air Force (IAF) has conducted successful test firing of Crystal Maze 2 missile.

Key Highlights:

- It is an air launched ballistic missile capable of hitting targets over 250 kilometers away.
- It is an extended stand-off range air-to-surface missile designed to strike high-value stationary and relocatable targets, including long-range radars and air defense systems.
- It is specifically effective in GPS denied environments, and can also penetrate areas protected by air defense systems.

Liquid Nitrogen For Preserving Food

- **Context:** The Food Safety department has issued an order on the use of liquid nitrogen used for preserving food.

Key Highlights:

- It is the liquefied form of the element nitrogen, which is produced commercially by compressing and cooling nitrogen gas to a point below its evaporation point of about $-196\text{ }^{\circ}\text{C}$ [$-320\text{ }^{\circ}\text{F}$].
- It is used for freezing, chilling and packing food. It helps to keep the food fresh for several months.
- It is used to freeze tumors, causing the cells to freeze and subsequently perish. It is also being used for cryopreservation of biological samples (sperm, eggs, animal genetic samples).
- Furthermore, it has also been used as a method for cooling concrete.
- Experts have raised few concerns regarding the use of liquid nitrogen for consumption. Exposure to it can cause organ or body part scorching, which resembles to frostbite.
- It leads to damage in areas such as the lips, tongue, throat, lungs, and stomach which may potentially results in lesions or tissue burns.

- If ingested, it may cause stomach perforation, and inhalation can produce CO₂ which could potentially lead to unconsciousness and even fatality.
- The Food Safety Department directed Designated Officers and Food Safety Officers to enforce the Food Safety and Standards Act 2006 against any Food Business Operator using liquid nitrogen directly with food items such as biscuits, ice creams, and wafer biscuits.
- It must be completely evaporated from food or drinks before they are served.

29th APRIL, 2024

India's Chinese Import Bill Rise

- **Context:** According to a report by the Global Trade Research Initiative (GTRI), Goods imports from China have risen 2.3 times faster than India's total imports over 15 years.

Key Highlights:

- India's imports from China crossed \$101 billion in 2023-24 from about \$70 billion in 2018-19, and the country's share of India's industrial goods imports has risen from 21% to 30% over 15 years.
- India's total merchandise imports stood at \$677.2 billion in 2023-24, of which 15% or \$101.8 billion worth goods were sourced from China.
- China is the top supplier in eight major industrial sectors, including machinery, chemicals, pharmaceuticals, textiles etc.
- Between 2018-19 and 2023-24, India's exports to China have stagnated around \$16 billion annually while imports have surged, resulting in a cumulative trade deficit exceeding \$387 billion over six years.

Phi-3-Mini: 'lightweight' AI model

- **Context:** Microsoft unveiled the latest version of its 'lightweight' AI model – the Phi-3-Mini.

Key Highlights:

- It is the smallest AI model developed by Microsoft. It is believed to be the first in a series of three smaller models planned by Microsoft.

- It reportedly outperformed models of the same size and the next size up across a variety of benchmarks, in areas like language, reasoning, coding, and maths.
- Essentially, language models are the backbone of AI applications like ChatGPT, Claude, Gemini, etc.
- These models are trained on existing data to solve common language problems such as text classification, answering questions, text generation, document summarisation, etc.
- The affairs of the NCGG are managed under the overall superintendence and direction of the Governing Body, which is headed by the Cabinet Secretary.
- It has Secretaries of 9 ministries/ departments and 5 eminent persons viz. academicians, eminent administrators, specialists, eminent innovators, heads of reputed institutions as members.
- The Director General, who is the Chief Executive of NCGG, acts as the Member-Secretary of the Governing Body.

30th APRIL, 2024

National Centre for Good Governance (NCGG)

- **Context:** Shri. V. Srinivas, Secretary of DARPG, will lead a 4-member delegation to Bangladesh. They will engage in bilateral discussions to renew the MOU between NCGG India and the Bangladesh Ministry of Public Administration for 2024-2029.

Key Highlights:

- It is an apex-level autonomous institution under the Ministry of Personnel, Public Grievances and Pensions.
- It was set by the Government of India in 2014.
- The Centre traces its origin to the National Institute of Administrative Research (NIAR), which was set up in 1995 by the Lal Bahadur Shastri National Academy of Administration (LBSNAA). NIAR was subsequently rechristened and subsumed into NCGG.
- NCGG function as a national repository on information on best practices, initiatives and methodologies that promote Good Governance, e-Governance etc.
- NCGG advise on key issues in governance and develop synergy across various Ministries/ Departments of GoI, and State Governments.
- To engage in provision of consultancy services in and outside the country
- Its mandate includes governance, policy reforms, capacity building, and training for civil servants and technocrats in India and other developing nations. It also serves as a think tank.

Green taxonomy

- **Context:** The latest RBI's Monetary Policy Report gives primacy to the impact of climate shocks on the economy's financial stability. This reflects RBI's step towards the adoption of the system of green taxonomy, being used by the ASEAN countries.

Key Highlights:

- Green taxonomy is a framework that is used to determine environmentally sustainable investment in the economy. It helps in classification of whether the economic activities as green and environmentally sustainable.
- It aims to increase investment in green activities and assets and facilitate the detection of greenwashing practices.
- It helps the financial markets to align their investments with the goal of net-zero emissions.
- It also helps in the cultivation of an environmentally sustainable economy. It also helps to reorient capital towards environmentally sustainable economic activities.
- The RBI and Finance Ministry can draw lessons from the ASEAN region. The ASEAN countries have adopted a dynamic green taxonomy, which is continuously updated according to the evolving sustainable practices in different sectors.
- RBI has taken positive steps towards green taxonomy by issuing Sovereign Green Bonds and expanding participation in green government securities by Foreign Institutional Investors.