

WEEKLY CURRENT AFFAIRS

AUGUST, 2023



** Useful for ** ---

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

15th AUGUST, 2023

ISRO's Aditya-L1, India's first Solar mission

• Context: India's first solar mission, Aditya-L1 is expected to be launched by late August or early September

Key Highlights:

- It is the first space-based Indian observatory to study the Sun
- Aditya-L1 will be positioned 1.5 million kilometers away from Earth in a halo orbit around the L1 point. This location offers a significant advantage for observing solar activities and their impact on space weather in real time.
- The spacecraft carries seven payloads for studying the photosphere, chromosphere, and outer layers of the Sun (known as the corona) by using electromagnetic and particle and magnetic field detectors.
- · Out of seven payloads, four payloads will directly view the Sun and the remaining three payloads will carry out in-situ studies of particles and fields at L1.

WHO Traditional Medicine Global Summit

• Context: The first WHO Traditional Medicine Global Summit will take place in Gandhinagar, Gujarat.

Key Highlights:

- In 2022, WHO with the support of the Government of India established the Global Centre for Traditional Medicine in Jamnagar, Gujarat.
- The centre provides leadership on all global health matters related to traditional medicine as well as extending support to member countries in shaping various policies related to traditional medicine research, practices and public health.
- It is the first and only global outpost for traditional medicine across the globe.

- To bring together various stakeholders, such as traditional medicine practitioners, policymakers, academics, and others on a common platform to share best practices, evidence and innovation related to how traditional medicine contributes to health and sustainable development.
- Traditional and complementary medicine has been vital for health in communities for centuries and has influenced modern medical knowledge.
- About 40% of today's medicines have natural origins, including well-known drugs like aspirin and artemisinin.
- Currently, 170 countries have informed WHO about their use of traditional medicine, seeking evidence and data to guide safe, cost-effective, and fair policies and regulations.

16th AUGUST, 2023

Graphene-Aurora program

• Context: The Ministry of Electronics & Information Technology(MeitY) Secretary has launched the 'Graphene-Aurora program' at a function in Maker Village Kochi, Kerala.

- The program shall be implemented by Digital University Kerala with joint funding from MeitY and Government of Kerala and Industry partners.
- Graphene is often referred to as a wonder material for its extraordinary electrical and electronic properties.
- Graphene was discovered in 2004 by Andre Geim and Konstantin Novoselov, who received the Nobel Prize in Physics for this in 2010.
- It is stronger than steel, very stretchable and can be used as a flexible conductor. Its thermal conductivity is much higher than that of silver.
- It can be used in touch screens, light panels and solar cells.

- It has a lot of additional applications such as: anti-corrosion coatings and paints, efficient and precise sensors, faster and efficient electronics, flexible displays, efficient solar panels, faster DNA sequencing, drug delivery and more.
- The centre shall fill the gap between R&D and commercialization by providing a complete facility to startup and industry.
- It shall also nurture the deep/emerging Graphene technology & innovation ecosystem that can guide. develop, implement and support SMEs and startups to commercialize developed graphene technologies for scale adoption.
- Maker Village is a pioneering startup initiative of the Ministry of Electronics and Information Technology. Government of India with Indian Institute of Information Technology, Trivandrum as the implementation agency and Kerala Startup Mission as the supporting partner. It is India's largest electronic hardware incubator and ESDM (Electronics System Design & Manufacturing) facility.

Inclusive Conservation Initiative (ICI)

• **Context:** A report has been released on the initial phase of the Inclusive Conservation Initiative (ICI).

Key Highlights:

- The report highlights that even though funding commitments have risen for Indigenous Peoples and local communities (IP and LC) to improve conservation. But their overall funding situation hasn't really improved.
- For instance, donors have given Indigenous Peoples and local communities less than 1% of the funds for addressing climate change impacts and adaptations.
- The Inclusive Conservation Initiative (ICI) was endorsed by Global Environment Facility (GEF) in 2022.
- Its aim is to enhance Indigenous Peoples' and Local Communities' (IPs and LCs) efforts to protect land, waters and natural resources to deliver global environmental benefits.

- The initiative will support enhanced Indigenous and community stewardship across 7.5 million hectares of landscapes, seascapes, and territories with high biodiversity and irreplaceable ecosystems.
- Technical support and supervision by Conservation International and the International Union for Conservation of Nature (IUCN).
- Indigenous Peoples and local communities make up just 5% of the world's population. But they steward 25% of land and 40% of intact ecosystems on Earth. Yet, many have lacked financial support to improve and scale their sustainable management of these territories.
- This initiative will provide financial support to these Indigenous and locally-led initiatives.

17th AUGUST, 2023

Handbook on Combating Gender Stereotypes

• Context: The Supreme Court has launched a handbook titled "Handbook on Combating Gender Stereotypes" to remove gender stereotypes from the law.

- Its aim is to free the judiciary and the legal community from the mechanical application of gender stereotypical language in judgments, orders, and court pleadings.
- To assist judges and the legal community in identifying, understanding and combating stereotypes about women.
- The language a judge uses reflects not only their interpretation of the law, but their perception of society as well.
- Even when the use of stereotypes does not alter the outcome of a case, stereotypical language may reinforce ideas contrary to our constitutional ethos.

- Language is critical to the life of the law. Words are the vehicle through which the values of the law are communicated. Words transmit the ultimate intention of the lawmaker or the judge to the nation.
- The handbook identifies common stereotypical words and phrases used about women, many of them routinely found in judgements. For example In the 2017 SC ruling awarding the death penalty for the convicts in the Delhi gang-rape case, the verdict repeatedly uses the word "ravished" to say raped.
- The 2017 judgment of the Kerala High Court had said "A girl aged 24 years is weak and vulnerable, capable of being exploited in many ways".
- The handbook also contains a glossary of gender unjust terms and suggests alternative words and phrases which may be used. For example Instead of using words like "seductress", "whore" or "woman of loose morals", the word "woman" has to be used.
- The handbook also prohibits use of words like "hooker" and "prostitute" and said the term "sex worker" be used instead.
- The word "eve-teasing" will now be termed as "street sexual harassment" and "housewife" will now become "homemaker" for judicial discourses.
- The handbook also deals with the "so-called inherent characteristics" of women.
- One of the identified stereotypes is the idea that women are overly emotional, illogical, and cannot take decisions. The reality is that a person's gender does not determine or influence their capacity for rational thought.
- It also refers to assumptions made about a woman's character based on her expressive choices, such as the clothes she wears, and her sexual history.
- Such assumptions may impact the judicial assessment of her actions and statements in a case involving sexual violence. For instance, they diminish the importance of consent in sexual relationships.

Vishwakarma scheme

• Context: The Cabinet Committee on Economic Affairs has approved a new Scheme named "PM Vishwakarma".

- Its is a Central Sector Scheme aims to strengthen and nurture the Guru-Shishya parampara or familybased practice of traditional skills by artisans and craftspeople working with their hands and tools.
- To improve the quality, as well as the reach of products and services of artisans and craftspeople and to ensure that the Vishwakarmas are integrated with the domestic and global value chains.
- The scheme will provide support to artisans and craftspeople of rural and urban areas across India.
- Eighteen traditional trades will be covered under the scheme. These include carpenter, boat maker, armourer, blacksmith, hammer and tool kit maker, locksmith, goldsmith, potter, sculptor, breaker, cobbler, mason, basket/mat/broom maker/ coir weaver, traditional doll and toy maker, barber, garland maker, washerman, tailor and fishing net maker.
- Artisans and craftspeople will be provided a recognition through PM Vishwakarma certificate and ID card.
- The scheme has a provision of credit support of up to 1 lakh (first tranche) and 2 lakh (second tranche) with a concessional interest rate of 5%.
- It also has a provision to provide skill upgradation. incentive for toolkit as well as digital transactions and marketing support.
- Skilling programmes will take place at both basic and advanced types. Participants will get a stipend of 500 per day while undergoing training.
- Beneficiaries will also receive up to 15,000 to buy modern tools.

PM-eBus Sewa Scheme

• Context: The Union Cabinet has approved PM-eBus Sewa to improve urban mobility and decarbonise public transport in cities.

Key Highlights:

- An e-bus is any bus whose propulsion and accessory systems are powered exclusively by a zero-emissions electricity source.
- Its aim is to enhance green mobility in the cities.
- The scheme will cover cities of Three lakh and above population as per census 2011 including all the Capital cities of Union Territories, North Eastern Region and Hill States.
- Under this scheme priority will be given to cities having no organized bus service.
- In 169 cities, 10,000 e-buses will be deployed using a public-private partnership (PPP) model.
- Infrastructure will also be developed or upgraded to support the new e-buses, including the creation of behind-the-meter power infrastructure like substations.
- In 181 other cities, infrastructure will be upgraded under the green urban mobility initiatives
- Initiatives will focus on bus priority, infrastructure, multimodal interchange facilities, automated fare collection systems and charging infrastructure.
- States or cities will be responsible for running the bus services and making payments to the bus operators.
- The Central government will support these bus operations by providing subsidies to the extent specified in the scheme.
- Around 45,000 to 55,000 direct jobs are expected to be generated via the scheme.
- The adoption of electric mobility services will help reduce noise and air pollution in Indian cities and also curb carbon emissions.
- The scheme is also expected to bring in economies of scale for the procurement of electric buses through aggregation.

18th AUGUST, 2023

'SAMUDRA' mobile app

• **Context:** Indian National Centre for Ocean Information Services (INCOIS) has launched a new mobile application named 'SAMUDRA'.

Key Highlights:

- SAMUDRA stands for Smart Access to Marine Users for Ocean Data Resources and Advisories.
- Its purpose is to offer comprehensive information on all ocean related services, useful for both seafarers and the fishing community.
- The app empowers users with real-time updates and critical alerts on oceanic disasters such as tsunamis, storm surges, high waves, and swell surge alerts, for the individuals and communities to stay informed and take necessary precautions towards the protection of lives and property.
- The app will be especially beneficial to the fishing community as it disseminates Potential Fishing Zone (PFZ) advisories which will guide them to the probable fish aggregation locations.

Global Initiative on Digital Health

• Context: India in collaboration with the World Health Organization (WHO) will launch the Global Initiative on Digital Health.

- Global Initiative on Digital Health launched by India in collaboration with the World Health Organization (WHO)
- The initiative is aimed at data convergence, interface of health platforms and investments in the digital health space around the globe.
- The initiative will include a digital platform which will consist of an investment tracker, an ask tracker (to understand who needs what kind of products and services) and a library of existing digital health platforms.

• The initiative would aid universal health convergence and improve healthcare service delivery.

The Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Bill, 2023

 Context: The Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Bill, 2023, was introduced in Rajya Sabha. It repeals the Election Commission (Conditions of Service of Election Commissioners and Transaction of Business) Act, 1991.

Key Highlights:

- As per Article 324 of the Constitution, the Election Commission consists of the Chief Commissioner (CEC) and such number of other Election Commissioners (ECs), as the President may decide. The CEC and other ECs are appointed by the President. The Bill specifies the same composition of the Election Commission. It adds that the CEC and other ECs will be appointed by the President on the recommendation of a Selection Committee.
- The Selection Committee will consist of: the Prime Minister as Chairperson. the Leader of the Opposition inLok Sabha as member, and a Union Cabinet Minister nominated by the Prime Minister as member. If the Leader of Opposition in Lok Sabha has not been recognised, the leader of the single largest opposition party in Lok Sabha will assume the role.
- A Search Committee will prepare a panel of five persons for the consideration of the Selection Committee. The Search Committee will be headed by the Cabinet Secretary. It will have two other members, not below the rank of Secretary to the central government, having knowledge and experience in matters related to elections. Selection Committee may also consider candidates who have not been included in the panel prepared by the Search Committee.

- Persons who are holding or have held posts equivalent to the rank of Secretary to the central government will be eligible to be appointed as CEC and ECs. Such persons must have expertise in managing and conducting elections.
- The 1991 Act provides that the salary of the ECs will be equal to that of a Supreme Court judge. The Bill provides that salary, allowance, and service conditions of the CEC and other ECs will be the same as that of the Cabinet Secretary.
- The 1991 Act mandates that the CEC and other ECs will hold office for a term of six years or until they reach the age of 65 years, whichever is earlier. If an EC is appointed as the CEC, his total term cannot exceed six years. The Bill retains the same tenure. Further, under the Bill, the CEC and other ECs will not be eligible for re-appointment.
- · All business of the Election Commission is to be conducted unanimously. In case of difference of opinion between the CEC and the other ECs on any matter, it shall be decided through majority.
- Under Article 324 of the Constitution, the CEC can only be removed from his office in a manner similar to that of a Supreme Court judge. This is done through an order of the President, based on a motion passed by both Houses of Parliament in the same session. The motion for removal must be adopted with: (i) majority support of total membership of each House, and (ii) at least two-thirds support from members present and voting. An EC can only be removed from office on the recommendation of the CEC. The Bill retains this removal procedure.
- Further, the 1991 Act provides that the CEC and other ECs may submit their resignation to the President. The Bill has the same provision.

19th AUGUST, 2023

Floodwatch App

• Context: The Central Water Commission (CWC) has launched an app, called 'Floodwatch'.

Key Highlights:

- Its purpose is to forecast the chances of floods a day in advance.
- To provide a seven-day advisory on the chances of floods at various stations in the country where the CWC maintains its measurement gauges.
- The app utilizes advanced technologies such as satellite data analysis, mathematical modeling and real-time monitoring to deliver accurate and timely flood forecasts.
- The app has a map of India with coloured circles at water stations across the country indicating the current risk of flooding.
- A 'green' circle indicates 'normal'; yellow, above normal; orange, 'severe'; and red, 'extreme'.
- Clicking on the circle shows the water level at the station, the danger level and warning level. The warnings are in English or Hindi with an option for a voice-enabled prompt.
- The app will also provide State-wise/basin-wide flood forecast up to 24 hours or flood advisory up to seven days, that can be accessed via selecting specific stations.
- The app marks a significant step towards utilizing smartphones to provide the public with up-to-date flood situation data and accurate forecasts spanning seven days.

RBI launches UDGAM Portal

• Context: RBI launches UDGAM web portal for searching unclaimed deposits

Key Highlights:

- UDGAM stands for Unclaimed Deposits Gateway to Access information.
- To aid users to identify their unclaimed deposits/ accounts and enable them to either claim the deposit amount or make their deposit accounts operative at their respective banks.
- Reserve Bank Information Technology Pvt Ltd (ReBIT), Indian Financial Technology & Allied Services (IFTAS) and participating banks.

- Initially, users would be able to access the details of their unclaimed deposits in respect of seven banks presently available on the portal.
- The search facility for remaining banks on the portal would be made available in a phased manner.

20th AUGUST, 2023

Pradhan Mantri Jan Dhan Yojana (PMJDY)

• Context: The total number of Jan Dhan accounts have crossed 50 crore.

- National Mission on Financial Inclusion popularly known as Pradhan Mantri Jan Dhan Yojana (PMJDY) was launched in 2014. It has completed almost 9 years.
- It offers multiple advantages to account holders such as a bank account without requirement of minimum balance, free of cost RuPay debit cards with inbuilt accident insurance of Rs. 2 lakh and overdraft facility of up to Rs. 10.000.
- The scheme has been successful in changing the financial landscape of the country and has brought near saturation in bank accounts for adults.
- The success of PMJDY also lies in the comprehensive nature of the scheme with an attempt to connect the last mile with the formal banking system through technology, collaboration and innovation.
- As per the latest reports submitted by banks, the total number of Jan Dhan accounts have crossed 50 crore as on 9th August 2023.
- Out of these accounts 56% accounts belong to women and 67% accounts have been opened in Rural / Semi-urban areas.
- The deposits in these accounts are above Rs. 2.03 lakh crore and about 34 crore RuPay cards have been issued in these accounts free of cost.
- The average balance in PMJDY accounts is Rs. 4,076 and more than 5.5 crore PMJDY accounts are receiving DBT benefits.

RBI guidelines for banks and other regulated entities (REs)

• Context: The Reserve Bank of India (RBI) has issued a fresh set of guidelines for banks and other regulated entities (REs) on the imposition of penal charges on loan borrowers.

Key Highlights:

- These guidelines have been issued after it was reported that many banks use penal rates of interest over and above the applicable interest rates in case of defaults / non-compliance by the borrower with the terms on which credit facilities were sanctioned.
- According to RBI guidelines, penalties charged for default on interest payments or non-compliance of material terms and conditions of loan contract by the borrower would now be accrued as 'penal charges' instead of 'penal interest'.
- To put it simply, lending entities would not be able to levy an ad-hoc additional penal rate of interest over and above the applicable rate of interest.
- For perspective about penal interest: say the borrower's EMI payment for the month of April is Rs 1,000 at 10% interest rate. They default on making a timely EMI payment which subjects them to an additional interest payment of 24% per annum (or 2% per month) over and above the interest component (at 10% of principal amount) already payable that month.
- RBI guidelines direct that 'penal interest' (at 2% p.a. in the example) be replaced with an 'penal charge', with no additional component to the rate of interest.
- There shall be no capitalisation of penal charges, that is, it shall be levied separately and not be added to the principal outstanding amount.
- The quantum of penal charges must be proportional to the defaults or non-compliance of material terms and conditions of a loan contract up to a certain threshold.
- This is to be determined by the lending entities themselves and must not be discriminatory within a particular loan/product category.

21st AUGUST, 2023

3D Printing

• Context: India's first 3D printed Post Office was inaugurated in Bengaluru's Cambridge Layout.

Key Highlights:

- 3D Printing is a process that uses computer-created design to make three-dimensional objects layer by layer.
- It is an additive process, in which layers of a material like plastic, composites or bio-materials are built up to construct objects that range in shape, size, rigidity and color.
- 3D Printing was invented in the 1980s by Charles W. Hull.
- To carry out 3D printing, a personal computer connected to a 3D printer is required. There is a need to design a 3D model of the required object on computer-aid design (CAD) software and press 'print'. The 3D printer will make the desired object.
- 3D printers construct the desired object by using a layering method, opposite of the subtractive manufacturing processes. It builds from the bottom up by piling on layer after layer until the object looks exactly like it was envisioned.
- The 3D printer acts generally the same as a traditional inkjet printer in the direct 3D printing process, where a nozzle moves back and forth while dispensing a wax or plastic-like polymer layer-by-layer, waiting for that layer to dry, then adding the next level.

Nanomechanical Testing Technology

• Context: Indian scientists in collaboration with two international institutions developed a novel method to test nanomechanical properties of materials at very minute scales with high precision and accuracy.

Key Highlights:

 Nanomechanical Testing Technology also known as the Nanoindentation technique.

- It was invented by Dr. Warren Oliver (KLA Corp.) and Dr. John Pethica (Oxford University) in the 80s conventional testing methods are not because always feasible at nano scales, which are usually of the order of 1/100th of the diameter of a human hair.
- It has been widely used to measure the strength of semiconductor devices and structural materials that have ubiquitously penetrated every aspect of our daily life through electronic gadgets.
- It has been used for a wide range of applications from identifying cancerous cells to establishing how meteorites are formed in deep space.
- The novel approach involved a combination of extensive modelling and simulation to understand the material response during an indentation test and subsequent tailoring of the methodology to improve the precision and accuracy.
- The modelling results have also been validated by experiments under extreme conditions.
- The new methodology not only significantly improves the precision and accuracy of what is known as nanoindentation technique or testing of mechanical strength, but enables testing at much higher rates, thus facilitating high throughput.
- The new methodology is expected to impact a broad spectrum of scientific research on measuring the strength of materials at small scales.

Floating rate to a Fixed rate regime

• Context: The Reserve Bank of India (RBI) asked all regulated entities (REs), including banks and NBFCs, to give personal loan borrowers an option to switch over from a floating rate to a fixed rate regime at the time of resetting interest rates.

Key Highlights:

 At the time of sanction, REs will have to clearly communicate to the borrowers about the possible impact of a change in benchmark interest rate on the loan leading to changes in EMI and/or tenor or both.

- Any increase in the EMI/ tenor or both will have to be communicated to the borrower immediately through appropriate channels.
- At the time of reset of interest rates. REs will have to give the option to borrowers to switch over to a fixed rate as per their board-approved policy. The policy will also specify the number of times a borrower will be allowed to switch during the tenor of the loan.
- REs will have to disclose all applicable charges for switching loans from floating to fixed rate and any other service charges/ administrative costs in the sanction letter and also at the time of revision of charges or costs from time to time.
- The borrowers will also be given the choice to opt for enhancement in EMI or elongation of tenor or for a combination of both options, and to prepay, either in part or in full, at any point during the tenor of the loan, with foreclosure charges.
- The supervisory reviews undertaken by the RBI and the feedback and references from members of the public have revealed several instances of unreasonable elongation of tenor of floating rate loans by lenders without proper consent and communication to the borrowers.
- Banks can change the interest rate by changing the internal benchmark rate and the spread during the term of the loan which could harm the interest of the borrower and also impair monetary transmission.
- The borrower can refinance the floating rate loan by going to another bank, but in practice, this does not work well. Floating rate loans of different banks with internal benchmarks are not identical even if spreads are identical at loan origination and in future. given that different banks change or reset internal benchmarks differently.
- The borrower in such a situation is more often left with no choice, but to remain captive to the original bank and pay higher charges on existing loans rather than refinance.