

www.vishnuias.com



OCTOBER

13.10.2021

CURRENT AFFAIRS

A MAGAZINE FOR CIVIL SERVICES PREPARATION

JOIN OUR TELEGRAM: <https://t.me/vishnuiasmentor>

Articles of the day
THE HINDU & INDIAN EXPRESS

UPSC

General Studies

Test Series

Online &
Offline
classes

One-Stop
Solution

Free daily
materials

GS 2 : Polity, Governance, International Relations

1. G20 Extraordinary Summit on Afghanistan

In News: India participated virtually in the G20 Extraordinary Summit on Afghanistan

- Convened by Italy (holds the G20 Presidency)
- Issues: related to the humanitarian situation; concerns relating to terrorism; and human rights in Afghanistan.

India's Views on Afghanistan

- Over the last two decades, India has contributed to promoting socio-economic development and capacity building of youth and women in Afghanistan (over 500 development projects)
- Emphasized the need for the international community to ensure that Afghanistan has immediate and unhindered access to humanitarian assistance.
- There's a need to enhance our joint fight against the nexus of radicalization, terrorism and the smuggling of drugs and arms in the region.
- Conveyed support for the important role of the United Nations in Afghanistan and called for renewed support of the G20 for the message contained in UN Security Council Resolution 2593 on Afghanistan.

G20

- The G20 is the international forum that brings together the world's major economies.
- Its members account for more than 80% of world GDP, 75% of global trade and 60% of the population of the planet.
- The G20 comprises 19 countries and the European Union. The 19 countries are Argentina, Australia, Brazil, Canada, China, Germany, France, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom and the United States
- The forum has met every year since 1999 and includes, since 2008, a yearly Summit, with the participation of the respective Heads of State and Government.

2. Swachh Bharat Mission (Urban)

In News: Cabinet approved the continuation of Swachh Bharat Mission (Urban) till 2025-26, with focus on

- Sustainability of Open Defecation Free (ODF) outcomes,
- Achieving scientific processing of Solid Waste in all cities, and
- Managing Wastewater in cities with less than 1 lakh population in Census 2011 [cities not covered under (AMRUT)].

Key Components

Sustainable Sanitation:

1. Ensuring complete access to sanitation facilities to serve additional population migrating from rural to urban areas in search of employment and better opportunities over the next 5 years.
2. Complete liquid waste management in cities in less than 1 lakh population – ensure that systems and processes are set up in every city so that all wastewater is safely contained, collected, transported and treated and no wastewater pollutes our water bodies.

Sustainable Solid Waste Management:

1. 100 percent source segregation of waste along with functional Material Recovery Facilities (MRFs) in every city, with a focus on phasing out single use plastic
2. Setting up of construction & demolition (C&D) waste processing facilities and deployment of mechanical sweepers in National Clean Air Programme (NCAP) cities and in cities with more than 5 lakh population
3. Remediation of all legacy dumpsites, so that 14,000 acres of locked up land lying under 15 crore tonnes of legacy waste are freed up.

Objectives of SBM(U)

- Eradication of open defecation in all statutory towns
- 100% scientific management of municipal solid waste in all statutory towns
- Effecting behaviour change through Jan Andolan

3. Pandora Papers

Pandora Papers

- The Pandora Papers is a leak of almost 12 million documents and files that reveals hidden wealth, tax avoidance and, in some cases, money laundering by some of the world's rich and powerful.
- The data was obtained by the **International Consortium of Investigative Journalists** in Washington DC, which has been working with more than 140 media organisations and more than 600 journalists from 117 countries on its biggest ever global investigation.
- The ICIJ has also said that the “data trove covers more than 330 politicians and 130 Forbes billionaires, as well as celebrities, drug dealers, royal family members and leaders of religious groups around the world”.

Is this the first time that such financial papers have been leaked?

- Since at least 2008, files indicating the manipulations by the rich have been stolen from financial institutions.
- In 2008, a former employee of the **LGT Bank of Liechtenstein** offered information to tax authorities.
- Again in 2008, Hervé Falciani obtained **confidential data on HSBC bank accounts** from remote servers and gave the data to then French Finance Minister Christine Lagarde, who then passed it on to the various governments, including India.
- In 2017, the **Paradise Papers** were leaked out mostly from the more than 100-year-old offshore law firm, Appleby, which operates globally.
- In 2016, the **Panama Papers** were obtained by hacking the server of the Panamanian financial firm, Mossack Fonseca.
- The leaked documents from Luxembourg, the “**Luxembourg Leaks**”, appeared in 2014.

The modus operandi

- The leaked papers now and even earlier have exposed the international financial architecture and illicit financial flows.
- For instance, Panama Papers highlighted the template used in other tax havens. The Pandora Papers once again confirm this pattern.
- Tax havens enable the rich to hide the true ownership of assets by using: trusts, shell companies and the **process of ‘layering’**.
- The process of layering involves moving funds from one shell-company in one tax haven to another in another tax haven and liquidating the previous company. This way, money is moved through several tax havens to the ultimate destination.
- Since the **trail is erased at each step**, it becomes difficult for authorities to track the flow of funds.

- **Financial firms offer their services** to work this out for the rich. They provide ready-made shell companies with directors, create trusts and 'layer' the movement of funds. Only the moneyed can afford these services.
- It appears that most of the **rich in the world use such manipulations** to lower their tax liability even if their income is legally earned. Even citizens of countries with low tax rates use tax havens.

Implications

- **Rise of Tax Havens:** Over the three decades, tax havens have enabled capital to become highly mobile, forcing nations to lower tax rates to attract capital. This has led to the 'race to the bottom',
- **Impairs Welfare Provision of Government:** Layering of money through tax havens results in a shortage of resources with governments to provide public goods, etc., in turn adversely impacting the poor.
- **Legally correct but morally wrong:** Strictly speaking, not all the activity being exposed by the Pandora Papers may be illegal, however, it is morally wrong for the rich to evade taxes which could have otherwise the poor people.
- **Complex Legal Process:** The authorities will have to prove if the law of the land has been violated in each of these revelations. Each country will have to conduct its investigations and prove what part of the activity broke any of their laws.
 - In the United Kingdom, the laws regarding financial dealings are very favourable to the rich and their manipulations.
- **Misplaced Focus on Unorganised Sector:** Indian Government's focus on the unorganised sector as the source of black income generation is also misplaced since data indicate that it is the organised sector that has been the real culprit and also spirits out a part of its black incomes through Tax Havens & layering.

Conclusion

- An interesting recent development (October 8) has been the agreement among almost 140 countries to levy a 15% minimum tax rate on corporates. Though it is a long shot, this may dent the international financial architecture.
- Other steps needed to tackle the curse of illicit financial flows are ending banking secrecy and a Tobin tax on transactions.

4. The sanctions cloud over India-U.S. ties

Context:

- India's Chief of the Air Staff had recently clarified that the delivery of the **S-400 Triumf air defence systems from Russia** is expected according to schedule.
 - India is scheduled to receive five squadrons of the **surface-to-air missile** systems from Russia.
- The U.S. Deputy Secretary of State had publicly announced that she was hoping that both the U.S. and India could amicably resolve the issue of India purchasing S-400 missile system from Russia and the **possibility of the U.S. sanctioning India for this purchase under its Countering America's Adversaries through Sanctions Act (CAATSA)**.
 - The Countering America's Adversaries through Sanctions Act (CAATSA) was enacted by the U.S. Congress to **discourage trade in the defence and intelligence sectors of Russia**.
 - The U.S. had imposed **sanctions on its NATO ally, Turkey and even China** for the procurement of the S-400 missile system. The sanctions include suspending the export licence, banning American equity/debt investments in entities, prohibiting loans from U.S. financial institutions and opposing loans from international finance institutions.
 - Despite the CAATSA, India had gone ahead and signed the agreement with Russia and also paid an advance for the S-400 missile system.

India's stand on the issue:

- India maintains that **it enjoys sovereign rights to purchase defence equipment for its safety and security**. India has stressed the **tactical importance of the defence missile systems** considering the environment in the Indian subcontinent wherein India could as well face a two-front war with China and Pakistan.

Arguments against the imposition of CAATSA sanctions on India:

- In the light of one section in the U.S. favouring the imposition of sanctions against India for its purchase of the S-400 missile system, the article argues that such a move should be avoided based on the following arguments.

Damage the India-U.S. relationship:

- The Imposition of CAATSA sanctions against India would have an **adverse impact on the otherwise growing India-U.S. bilateral relationship**.
 - The bilateral relationship between the U.S. and India now spans 50 sectors, including critical sectors like defence and economy. India has also been cooperating with the U.S. on matters of critical security.
- **India has also lately exhibited some degree of strategic tilt towards the U.S.** amidst the evolving situation in the regional as well as global platforms. In such a scenario the imposition of sanctions against India could lead to stirring up of the latent belief in the Indian political leadership and top bureaucracy that the **U.S. cannot be relied upon as a partner**.

Changing defence trade scenario:

- India has been diversifying its defence purchases and **reducing its dependency on Russia**.
 - Over the last decade, India's military purchase from Russia has steadily declined. India's import of arms decreased by 33% between 2011-15 and 2016-20 and Russia was the most affected supplier, according to a report by the Stockholm-based defence think-tank SIPRI.
 - In the same period, government-to-government deals with the U.S. touched \$20 billion and deals worth nearly \$10 billion are under negotiation. **The U.S. designated India as a Major Defence Partner in 2016 and gave India Strategic Trade Authorisation-1** which allows India access to critical defence technologies developed in the U.S. Also notably, defence manufacturers in both countries are exploring ways to co-develop and co-produce military equipment.
- Notably, one important provision in the CAATSA allows for a temporary waiver from sanctions for those countries which are trying to scale down their defence ties with Russia.

Evolving regional and global scenario:

- The geopolitical situation in the region is undergoing a drastic change. Today, there is a **growing relationship between China and Russia** with both countries seeking to expand engagement in Afghanistan from where the U.S. withdrew its military after two decades of war. **The U.S. is seeking to contain China and its growing assertiveness in the region via its Pivot to Asia policy.**
- India is having to deal with an increasingly aggressive China along its northern borders which have witnessed repeated Chinese incursions.
- India could play a critical role in this direction given India's centrality in the Indian Ocean region. Shedding its traditional non-alignment posture India

has been actively engaging with the U.S. and other like-minded countries on multilateral forums like the Quadrilateral Security Dialogue.

- The move to impose sanctions on India based on the **CAATSA could push India towards its traditional military hardware supplier, Russia.**

Does not affect U.S.'s interests:

- Given India shares the same vision as the U.S. on the Indo-Pacific construct and both the countries share strategic coherence on a wide range of issues, India's purchase of the S-400 missile system does not endanger the U.S.'s national security or affect its military operations in an adverse manner.

Conclusion:

- The CAATSA test will determine the course of the India-U.S. strategic partnership.
- Notably, the **CAATSA provides for a presidential waiver.** This allows the President to waive sanctions in certain circumstances. This provision should be exercised by the U.S. President to **provide a waiver for India for its purchase of the S-400 missile system** from Russia.

GS 3 : Economy, Science and Technology, Environment

5. Extended Producer Responsibility (EPR) for Plastic Waste Collection

The Environment Ministry has issued draft rules that mandate producers of plastic packaging material to collect all of their produce by 2024 and ensure that a minimum percentage of it be recycled as well as used in subsequent supply.

EPR

- Extended Producer Responsibility (EPR) means the responsibility of a producer for the environmentally sound management of the product (plastic packaging) until the end of its life.
- India had first introduced EPR in 2011 under the Plastic Waste (Management and Handling) Rules, 2011 and E-Waste Management and Handling Rules, 2011.

What are the new EPR rules for Plastic Waste?

(A) Plastic packaging

- The new EPR guidelines covers three categories of plastic packaging including:
 1. **Rigid plastic**
 2. **Flexible plastic packaging of single layer or multilayer** (more than one layer with different types of plastic), plastic sheets and covers made of plastic sheet, carry bags (including carry bags made of compostable plastics), plastic sachet or pouches
 3. **Multi-layered plastic packaging** which has at least one layer of plastic and at least one layer of material other than plastic.
- It has also specified a system whereby makers and users of plastic packaging can collect certificates – called Extended Producer Responsibility (EPR) certificates – and trade in them.

(B) Ineligible plastics for EPR

- Only a fraction of plastic that cannot be recycled will be eligible to be sent for end-of-life disposal such as road construction, waste to energy, waste to oil and cement kilns.
- Only methods prescribed by the Central Pollution Control Board will be permitted for their disposal.

Targets for recycling

- In 2024, a minimum 50% of their rigid plastic (category 1) will have to be recycled as will 30% of their category 2 and 3 plastic.
- Every year will see progressively higher targets and after 2026-27, 80% of their category 1 and 60% of the other two categories will need to be recycled.
- If entities cannot fulfil their obligations, they will on a “case by case basis” be permitted to buy certificates making up for their shortfall.

Effects on non-compliance

- Non-compliance, however, will not invite a traditional fine.
- Instead, an “environmental compensation” will be levied, though the rules do not specify how much this compensation will be.

Challenges in mandatory EPR

There are several challenges faced by both producers and bulk consumers that hinder proactive participation.

- **Consumer awareness:** Waste segregation has been the greatest challenge in India owing to lack of consumer awareness.
- **Lack of compliance:** The plastic producers do not wish to engage in the process holistically and take the effort to build awareness.
- **Large scale involvement:** The EPR doesn't take into account the formalization of informal waste pickers, aggregators and dismantlers.
- **Lack of recycle infrastructure:** These challenges range from lack of handling capacity to illegitimate facilities in the forms of multiple accounting of waste, selling to aggregators and leakages.

Way forward

- **Tracking mechanism:** What India needs is to develop tracking mechanisms and provide oversight of waste compliance, in order to ensure that the mechanism of waste disposal is streamlined.
- **Strict enforcement:** While enforcement strictness is of paramount importance, it is also vital to build an incentive structure around this to ensure better complicity by the producers.
- **Innovation:** The time is ripe for innovators to come up with an alternative for plastics and the strong will of the Government to rid the toxic waste in a sustainable and safe manner.

6. Government announces plastic waste recycling targets

In News : The Environment Ministry has issued draft rules that mandate producers of plastic packaging material to collect all of their produce by 2024

- The producers have to ensure that a minimum percentage of it be recycled as well as used in subsequent supply.

Key takeaways

- It has also specified a system whereby makers and users of plastic packaging could collect certificates – called Extended Producer Responsibility (EPR) certificates – and trade in them.

- Only a fraction of plastic that cannot be recycled would be eligible to be sent for end-of-life disposal such as road construction, waste to energy, waste to oil and cement kilns.
 - Only methods prescribed by the Central Pollution Control Board (CPCB) would be permitted for their disposal.
- Producers of plastic would be obliged to declare to the government, via a centralised website, how much plastic they produce annually.
- Companies would have to collect at least 35% of the target in 2021-22, 70% by 2022-23 and 100% by 2024.
- If entities cannot fulfil their obligations, they would on a “case by case basis” be permitted to buy certificates making up for their shortfall from organisations that have used recycled content in excess of their obligation.
- The CPCB would develop a “mechanism” for such exchanges on an online portal.
- Non-compliance would not invite a traditional fine. Instead an “environmental compensation” would be levied.

Categories of Plastic packaging

- Plastic packaging shall fall into three categories.
- The **first category** is “rigid” plastic;
- **Category 2** is “flexible plastic packaging of single layer or multilayer, plastic sheets and covers made of plastic sheet, carry bags, plastic sachet or pouches;
- The **third category** is called multilayered plastic packaging, which has at least one layer of plastic and at least one layer of material other than plastic.
- In 2024, a minimum 50% of their rigid plastic (category 1) would have to be recycled as would 30% of their category 2 and 3 plastic.
- Every year would see progressively higher targets and after 2026-27, 80% of their category 1 and 60% of the other two categories would need to be recycled.

7. MHA begins talks with Gorkha leaders, West Bengal Govt.

In News :

The Ministry of Home Affairs (MHA) began tripartite talks with Gorkha representatives from the Darjeeling hills, and the Terai and Dooars regions, and the Government of West Bengal.

The talks are aimed at resolving the issues related to the Gorkhas.

What is the Gorkha Issue?

- The Gorkhaland Movement is a movement mainly focused on the Darjeeling Hills of West Bengal, which demands the creation of a separate state of Gorkhaland.
- Gorkhaland consists of Nepali-speaking people of Darjeeling, Kalimpong, Kurseong and other hilly districts of West Bengal. The people belonging to these areas have ethnic, cultural and language differences with the Bengali community of West Bengal.
- The demand for Darjeeling as a separate administrative region dates back to 1907.

THE INDIAN EXPRESS

GS 2 : Polity, Governance, International Relations

1. AMRUT 2.0

In News: Cabinet has approved the Atal Mission for Rejuvenation and Urban Transformation 2.0 (AMRUT 2.0) till 2025-26, with aim of making the cities 'water secure' and 'self-sustainable' through circular economy of water.

This will be achieved by

- Providing functional tap connections to all households,
- Undertaking water source conservation/ augmentation,
- Rejuvenation of water bodies and wells,
- Recycle/re use of treated used water and rainwater harvesting

Key features:

- Mission will be monitored on a robust technology based portal.
- The projects will be geo-tagged.
- Cities will assess their water sources, consumption, future requirement and water losses through a city water balance plan. Based on this, city water action plans will be prepared which will be summed up as State Water Action Plan and will be approved by the Ministry of Housing and Urban affairs.
- Pey Jal Survekshan which will encourage competition among cities for benchmarking urban water services.
- Mission will also encourage mobilization of market finance by mandating implementation of 10% of worth of projects in cities with population above ten lakh through Public Private Participation.

- Mission will also bring in the leading technologies in water sector in world through technology sub-Mission.
- Entrepreneurs/ start-ups will be encouraged in water eco-system. Information Education and Communication (IEC) campaign will be undertaken to spread awareness among masses about water conservation.
- Mission has a reform agenda focussed towards financial health and water security of ULBs. Meeting 20% of water demand through recycled water, reducing non-revenue water to less than 20% and rejuvenation of water bodies are major water related reforms.
- Reforms on property tax, user charges and enhancing credit worthiness of ULBs are other important reforms.

2. France unveils \$35 bn revival plan

Context French President has unveiled a five-year, €30 billion (\$35 billion) investment plan for developing innovative technology and industrial activity.

Key takeaways

- The goal of the state-funded **France 2030 plan** is to boost France's economic growth over the next decade amid growing global competition with China and the U.S.
- The plan includes €8 billion to develop energy technology that would help reduce greenhouse gas emissions.
- The funding would finance the building of small, modular nuclear reactors in France, which relies on nuclear power for 70% of its electricity.
- The plan calls for €4 billion to be used to develop about 2 million electric and hybrid cars by the end of the decade.
- France will invest in building its first "low-carbon plane" by 2030.
- The plan also provides money to develop by 2026 a reusable launch system to propel spacecraft.

Carbon-neutral Economy

- EU leaders have agreed that nuclear energy could be part of its commitment to making its economy carbon-neutral by 2050, giving member countries the option of using it in their national energy mixes.
- However, Germany and some other countries argue that nuclear power should not be included in plans to finance greener energy because it requires mining and long-term storage of radioactive waste.
- France has vowed to become "the leader of green hydrogen" power by 2030

- Green hydrogen is a form of energy which does not emit carbon dioxide and can be used in industries such as steel and chemical manufacturing that currently rely on fossil fuels.

3. Controversy over Ease of Doing Business Rankings

Context: Recently, there were allegations of data tampering by **Kristalina Georgieva** (Former WB Chief & currently MD of IMF) in the World Bank's Ease of Doing Business rankings in favour of China.

What is the controversy around Georgieva?

- Georgieva is a Bulgarian economist who held several high-profile positions in European politics. In January 2017, she was appointed the chief executive of the World Bank group.
- In January 2019, she took over as the interim president of the WB group.
- In October 2019, she took over as Managing Director of the IMF.
- The trouble started when in January 2018, Paul Romer, then the chief economist of the World Bank told The Wall Street Journal that the World Bank's Ease of Doing Business (**EoDB**) rankings were tweaked for political reasons.
- Soon Romer resigned. Incidentally, Romer was awarded the Nobel Prize in Economics later that year for showing how knowledge can function as a driver of long-term growth.
- Romer's comments and resignation **kick-started a series of queries** both inside and outside the World Bank **about the integrity of EoDB rankings**.
- In particular, it was alleged that the EoDB rankings were tweaked to inflate the ranks for China (in EoDB 2018) and Saudi Arabia, UAE and Azerbaijan (EoDB 2020).

What has happened since the controversy broke out?

- In August 2020, the World Bank suspended its EoDB rankings after finding some **"data irregularities"**.
- The World Bank initiated a full review and an **independent investigation**. One such effort was to engage WilmerHale, a law firm, in January 2021.
- In its report, submitted September 2021, Wilmerhale's investigations found that the **World Bank staff did indeed manipulate data to help China's ranking** and they did so under pressure from Georgieva.

- The WilmerHale report states that at one point, when Georgieva took direct control of China's ranking and was looking for ways to raise it, it was suggested to just take the average of the two best performing cities – Beijing and Shanghai – as they do for several other countries (such as India) instead of taking a weighted average of several cities. By **cherry-picking the top two cities**, China's ranking would go up.
- These findings are particularly damning because **China is the third-largest shareholder in the World Bank** after the US and Japan, and it is being seen as manipulating its way to higher rankings.
- The investigation report did not find any evidence of wrongdoing with respect to the rankings of Saudi Arabia, UAE and Azerbaijan.

What are the EoDB rankings, and why do they matter?

- The EoDB rankings were started in 2002 to rank countries on a number of parameters to indicate **how easy or difficult it is for anyone to do business** in a country.
- Given the apparently extensive nature of rankings and that the World Bank was doing it, the EoDB soon became the **go-to metric for international investors** to assess risk and opportunity across the globe.
- Billions of dollars of **investments started becoming predicated** on where a country stands on EoDB and whether it is improving or worsening.
- It also acquired **massive political significance** as leaders in different countries started using EoDB rankings to either claim success for their policies.

How can the ranking methodology be improved?

On September 1, the World Bank also published the findings of an external panel review of its EoDB methodology. It stated that “the current methodology should be significantly modified, implying a major overhaul of the project.

Some of the key recommendations are:

- Any ranking based on such a small sample ignored the ease of doing business in other cities & regions of the country. Thus, there is a need for **broad basing the data collection** from a larger representative samples of “actual” business owners and operators.
- **Not to ignore the government functions** that provide essential public goods to the private sector: transport and communications infrastructure, a skilled workforce, law and order, etc.
- Do not rank countries on their **tax rates**. From a societal standpoint, collecting taxes is necessary, and thus lower tax rates are not necessarily better.

- Eliminate the indicators “Protecting Minority Shareholders” and “Resolving Insolvency.”
- Make the “**Contracting with Government**” indicator more relevant.
- Restore and improve the “Employing Workers” indicator, but do not rank countries based on this information.
- **Improve the transparency** and oversight of Doing Business.

Is this the first time the head of the IMF and/or World Bank has been in a controversy?

- No. In recent years, several heads of the World Bank and IMF have been found guilty of some wrongdoing or the other.
- In **2011, Dominique-Strauss Kahn**, then the MD of IMF, had to resign after he was arrested in the US following **allegations of sexual assault**.
- Rodrigo Rato, IMF’s MD between 2004 and 2007, was jailed in Spain for a credit card scandal in 2017.
- **Christine Lagarde**, who was IMF MD between 2011 and 2017, has been found guilty of negligence in allowing the **misuse of public funds in 2016** for a case dating back to 2011.
- Paul Wolfowitz, president of the World Bank between 2005 and 2007, had to resign following ethical violations and his romantic links with a World Bank employee.
- The role of Jim Yong Kim, who was World Bank president until 2019, is also being questioned in the rankings controversy.

GS 3 : Economy, Science and Technology, Environment

4. Ensuring sustainable turnaround in financial health of discoms

In News :

In its budget 2021-22, the Union government had announced the launch of a “reforms-based and results-linked” scheme for the distribution sector.

Precarious financial condition of discoms

- Their overall **debt burden**, despite the implementation of the UDAY scheme, is estimated to increase to **around Rs 6 lakh crore in the ongoing financial year**.
- Moreover, their annual cash losses are estimated to be about Rs 45,000-50,000 crore (excluding UDAY grants and regulatory income).
- Due to **highly subsidised nature of power tariffs** towards agriculture and certain sections of residential consumers, the overall **subsidy dependence is likely to be roughly Rs 1.30 lakh crore** this year at the all-India level.

Revamped Distribution Sector Scheme

- In its budget 2021-22, the Union government had announced the launch of a **“reforms-based and results-linked”** scheme for the distribution sector.
- Subsequently, the **Revamped Distribution Sector Scheme** was notified in July with an overall outlay of **Rs 3.03 lakh crore**.
- Under the scheme, AT&C losses are sought to be brought down to 12-15 per cent by 2025-26, from 21-22 per cent currently.
- **Operational efficiencies** of discoms are to be improved through **smart metering and upgradation of the distribution** infrastructure, including the **segregation of agriculture feeders** and strengthening the system.
- The scheme has two parts – **Part A with an outlay of Rs 3.02 lakh crore**, pertains to the upgradation of the distribution infrastructure and metering related works.
- **Part B**, with an outlay of Rs 1,430 crore, is for training and capacity building, besides other enabling and support activities.
- Discoms and their state governments will have to sign a tripartite agreement with the central government in order to avail benefits under the scheme.
- Only those discoms that meet all the pre-qualifying criteria will be eligible for the release of funds.
- A loss-making discom will not be eligible unless it draws up plans to reduce its losses, approved by the state government and filed with the central government.
- As far as the agricultural sector is concerned, the use of solar power projects to supply electricity to these consumers through the agriculture feeder route is likely to result in savings.
- This is because of a combination of high tariff competitiveness offered by solar power, lower technical losses due to proximity to load centres, and the ability to meet demand during the day when sunlight is available.
- In addition, the **delicensing initiative** proposed by the central government can effect significant changes in the distribution segment, facilitating

competition and placing emphasis on the quality and reliability of power supply and consumer services.

Issue of tariff determination

- A continuing area of concern affecting discom finances is the significant delay in the process of tariff determination in many states.
- As of now, only 19 out of 28 states have issued tariff orders for 2021-22, indicating sluggish progress.
- Further, there is upward pressure on the cost of power supply for distribution utilities, considering the **dominant share (around 70 per cent) of coal in the fuel mix** for energy generation, the strengthening of imported coal prices and the possibility of domestic coal price revisions by Coal India.
- As a consequence, a **cost-reflective tariff determination process**, coupled with the timely pass-through of power purchase costs, remains critical for the utilities.

Conclusion

On the whole, while the focus on improving the operational efficiency, and ensuring the financial sustainability of discoms is indeed welcome, timely implementation of the reforms is critical to achieving the milestones.

5. Amendments to the Forest Conservation Act, 1980

The Ministry for Environment, Forests and Climate Change (MoEFCC) has published proposed amendments to the Forest Conservation Act, 1980.

The Forest (Conservation) Act, 1980

The FCA is the principal legislation that regulates deforestation in the country.

- It prohibits the felling of forests for any “non-forestry” use without prior clearance by the central government.
- The clearance process includes seeking consent from local forest rights-holders and from wildlife authorities.
- The Centre is empowered to reject such requests or allow it with legally binding conditions.
- In a landmark decision in 1996, the Supreme Court had expanded the coverage of FCA to all areas that satisfied the dictionary definition of a forest;

earlier, only lands specifically notified as forests were protected by the enforcement of the FCA.

The FCA is brief legislation with only five sections of which-

- Section 1 defines the extent of coverage of the law,
- Section 2 restrictions of activities in forest areas and the rest deals with the creation of advisory committees, powers of rule-making and penalties.

Why is the Act being amended now?

- The current definition of forests has locked land across the country; even private owners cannot utilise their own property for non-forestry purposes.
- The pressure for forest land diversion has been coming from – Ministries such as Rail and Roads.
- Under the Act, any diversion of any forest land for any purpose, including assignment of leases, needs prior approval of the Centre.

What defines 'Forest' under this act?

- Previously, the Act had applied largely to reserve forests and national parks.
- In 1996, ruling in **T N Godavarman Thirumulpad v Union of India Case**, the Supreme Court had expanded the definition and scope of forest land.
- It would thus include all areas recorded as forest in any government record, irrespective of ownership, recognition and classification.
- The court also expanded the definition of forests to encompass the "dictionary meaning of forests".
- This would mean that a forested patch would automatically become a "deemed forest" even if it is not notified as protected, and irrespective of ownership.
- The Act would also be applicable over plantations in non-forest land.

What are the proposed amendments?

(A) Exemptions for Road and Railways

- The MoEFCC has proposed that all land acquired by the Railways and Roads Ministries prior to 1980 be exempted from the Act.
- Once the lands had been acquired for expansion, but subsequently, forests have grown in these areas, and the government is no longer able to use the land for expansion.
- The Ministries will no longer need clearance for their projects, nor pay compensatory levies to build there.

(B) Relaxation

- It distinguishes individuals whose lands fall within a state-specific Private Forests Act or comes within the dictionary meaning of forest as specified in the 1996 Supreme Court order.
- The government proposes to allow the “construction of structures for bona fide purposes” including residential units up to 250 sq m as a one-time relaxation.

(C) Defense and other projects

- Defence projects near international borders will be exempted from forest clearance.
- Oil and natural gas extraction from forested lands will be permitted, but only if technologies such as Extended Reach Drilling are used.
- Strip plantations alongside roads that would fall under the Act will be exempted.

What are the concerns?

- **Legalizing private ownership of forests:** The rules will facilitate corporate ownership.
- **Deforestation:** The exemption of forests on private land will lead to the disappearance of large tracts of forests.
- **Fragmentation:** Exemption for private residences on private forest will lead to fragmentation of forests, and open areas such as the Aravalli mountains to real estate.
- **Tribal concerns:** The amendments do not address what will happen to tribals and forest-dwelling communities over the cleared lands.
- **Threat to wildlife:** Exemption for roads and railways on forest land acquired prior to 1980 will be detrimental to forests as well as wildlife – especially elephants, tigers and leopards.

Positives with the amendment

- It has proposed making forest laws more stringent for notified forests, making offences non-bailable with increased penalties including imprisonment of up to one year.
- It has disallowed any kind of diversion in certain forests.
- It has attempt to define and identify forests once and for all – something that has been often ambiguous.

6. James Webb: The most powerful space telescope

On Dec 18, 2021, after years of delays, the James Webb Space Telescope is scheduled to launch into orbit and usher in the next era of astronomy.

James Webb Space Telescope

- JWST is a joint NASA–ESA–CSA space telescope that is planned to succeed the Hubble Space Telescope as NASA’s flagship astrophysics mission
- It is the most powerful space telescope ever built.
- It will enable a broad range of investigations across the fields of astronomy and cosmology, including observing some of the most distant events and objects in the universe,
- It would help understand events such as the formation of the first galaxies, and detailed atmospheric characterization of potentially habitable exoplanets.

Its significance

- Some have called JSWT the “telescope that ate astronomy.”
- It is said to look back in time to the Dark Ages of the universe.

What does the ‘Dark Ages’ of the universe mean?

- Evidence shows that the universe started with an event called the Big Bang 13.8 billion years ago, which left it in an ultra-hot, ultra-dense state.
- The universe immediately began expanding and cooling after the Big Bang.
- One second after the Big Bang, the universe was a hundred trillion miles across with an average temperature of an incredible 18 billion F (10 billion C).
- Around 400,000 years after the Big Bang, the universe was 10 million light-years across and the temperature had cooled to 5,500 F (3,000 C).
- Throughout this time, space was filled with a smooth soup of high-energy particles, radiation, hydrogen and helium.
- There was no structure. As the expanding universe became bigger and colder, the soup thinned out and everything faded to black.

This was the start of what astronomers call the Dark Ages of the universe.

How will JWST study this?

Ans. Looking for the first light

- The Dark Ages ended when gravity formed the first stars and galaxies that eventually began to emit the first light.
- Astronomers aim to study this fascinating and important era of the universe, but detecting first light is incredibly challenging.
- Compared to massive, bright galaxies of today, the first objects were very small and due to the constant expansion of the universe, they're now tens of billions of light years away from Earth.
- Also, the earliest stars were surrounded by gas left over from their formation and this gas acted like fog that absorbed most of the light.
- It took several hundred million years for radiation to blast away the fog. This early light is very faint by the time it gets to Earth.

7. Nutrient Based Subsidy (NBS) for P&K Fertilizers

The Cabinet Committee on Economic Affairs has approved the proposal of the Department of Fertilizers for fixation of Nutrient Based Subsidy Rates for P&K Fertilizers for the year last quarter of the year 2021-22.

Nutrient Based Subsidy (NBS)

- The NBS Scheme for fertilizer was **initiated in the year 2010** and is being implemented by the Department of Fertilizers.
- Under the scheme, a fixed amount of subsidy decided on an annual basis is provided on each grade of subsidized P&K fertilizers, **except for Urea** based on the nutrient content present in them.
- It is largely for secondary nutrients like N, P, S and K and micronutrients which are very important for crop growth and development.
- In India, urea is the only controlled fertilizer and is sold at a statutory notified uniform sale price.

NPK

- So now that you know what the numbers on fertilizer mean, you need to know why NPK is important to your plants.
 - All plants need nitrogen, phosphorus, and potassium to grow. Without enough of any one of these nutrients, a plant will fail.
1. **Nitrogen (N):** It is largely responsible for the growth of leaves on the plant.
 2. **Phosphorus (P):** It is largely responsible for root growth and flower and fruit development.
 3. **Potassium (K):** It is a nutrient that helps the overall functions of the plant perform correctly.

- Knowing the NPK values of fertilizer can help you select one that is appropriate for the type of plant you are growing.

What NBS provides?

- **Fixing MRP of NPK fertilizers:** The scheme allows the manufacturers, marketers, and importers to fix the MRP of the Phosphatic and Potash fertilizers at reasonable levels.
- **Maintaining stock level:** The MRP will be decided considering the domestic and international prices of P&K fertilizers, inventory level in the country and the exchange rates.
- **Inflation control:** The NBS ensures that an adequate quantity of P&K is made available to the farmers at a statutory controlled price.

Issues with NBS

- **Leaves urea:** Urea which the most widely used, is left-out in the scheme and hence it remains under price control as NBS has been implemented only in other fertilizers.
- **Cost on exchequer:** Fertilizer subsidy is the second-biggest subsidy after food subsidy.
- **Costs on Economy and Environment:** The NBS policy is not only damaging the fiscal health of the economy but also proving detrimental to the soil health of the country.
- **Black marketing:** Subsidised fertilizers is getting diverted to bulk buyers/traders or even non-agricultural users such as plywood and animal feed makers.

8. Sea rise to continue for centuries

In News : The researchers have warned that even if humanity caps global warming at 1.5 degrees Celsius above pre-industrial levels, seas will rise for centuries to come and swamp cities currently home to half-a-billion people.

Key takeaways

- If temperature rises another half-degree above that benchmark, an additional 200 million of today's urban dwellers would regularly find themselves knee-deep in sea water and more vulnerable to devastating storm surges.
- Worst hit in any scenario will be Asia, which accounts for nine of the 10 mega-cities at highest risk.
- Land home to more than half the populations of Bangladesh and Vietnam fall below the long-term high tide line.

- Built-up areas in China, India and Indonesia would also face devastation.
- Most projections for sea level rise run to the end of the century. But oceans will continue to swell for hundreds of years beyond 2100 – fed by melting ice sheets, heat trapped in the ocean and the dynamics of warming water – no matter how aggressively greenhouse gas emissions are drawn down.

9. Global Tax Reforms

Context: After years of intensive negotiations to bring the international tax system into the 21st century, 136 countries have reached an agreement on the **Two-Pillar Solution** to Address the Tax Challenges Arising from the Digitalisation of the Economy. This will ensure big companies pay a minimum tax rate of 15%, making it harder for them to avoid taxation.

What is the global minimum tax deal?

The global minimum tax agreement does not seek to eliminate tax competition but puts **multilaterally agreed limitations** on it.

- **Under Pillar One** of the agreements, taxing rights on more than 125 billion US Dollars of profit are expected to be reallocated to market jurisdictions each year.
- **Pillar Two** of this agreement introduces a global minimum corporate tax rate at 15%. The new minimum tax rate will apply to companies with revenue above 750 million Euros and is estimated to generate around 150 billion US dollars in additional global tax revenues annually.
- Further benefits are also expected from the stabilisation of the international tax system and the increased tax certainty for taxpayers and tax administrations.

Why a global minimum tax?

- With budgets strained after the COVID-19 crisis, many governments want to discourage multinationals from shifting profits and tax revenues to low-tax countries regardless of where their sales are made.
- Increasingly, income from intangible sources such as drug patents, software and royalties on intellectual property has migrated to these jurisdictions, allowing companies to avoid paying higher taxes in their traditional home countries.
- The minimum tax and other provisions aim to put an end to decades of tax competition between governments to attract foreign investment.

The Impact

- The OECD, which has steered the negotiations, estimates the minimum tax will generate \$150 billion in additional global tax revenues annually.
- Taxing rights on more than \$125 billion of profit will be additionally shifted to the countries where they are earned from the low tax countries where they are currently booked.
- The deal will encourage multinationals to repatriate capital to their country of headquarters, giving a boost to those economies.
- However, various deductions and exceptions included in the deal are at the same time designed to limit the impact on low tax countries like Ireland, where many US groups base their European operations.

Prelims Practice Questions

1. Paddy straw consists of which of the following?

1. Urea
2. Silica
3. Lignin
4. Oxalates
5. Molasses
6. Selenium

Select the correct answer using the codes given below:

- a. 3, 4 and 5 only
- b. 2, 3, 4 and 6 only
- c. 1, 2, 3, 4 and 6 only
- d. All of the above

Answer : b

Paddy Straw

- Punjab Government has recently proposed to use the paddy crop residue as fodder for animals, especially cattle.

Background

- Producing over 20 million tonnes of paddy straw every year, most of which is burnt in fields by farmers, leading to widespread air pollution that even spreads to neighbouring states.

Challenges

- High silica and lignin content reduces its digestive properties.
- Higher selenium content in paddy straw also limits its use as fodder in animals as compared to wheat straw.
- However, if given in moderate quantities (up to 5 kg per animal per day), selenium poses no health hazard to the animal.
- Paddy straw also contains oxalates (2-2.5%) which leads to calcium deficiency so mineral mixture should always be fed along with the straw.

Treatment

There are two methods that have been recommended to overcome the challenges of using paddy straw as cattle fodder:

1. Urea-only treatment
2. Urea plus molasses treatment

2. With respect to International Energy Agency (IEA), which of the following statements is/are correct?

1. Membership in the IEA is restricted to advanced economy members of the Organization for Economic Co-operation and Development (OECD).
2. The World Energy Outlook is published by IEA.

Options:

- a. 1 only
- b. 2 only
- c. 1 and 2 only
- d. None

Answer: c

Explanation:

- The IEA was founded in 1974 by industrialised countries – within the framework of the Organisation for Economic Co-operation and Development (OECD) – in response to the oil embargo.
- It is a Paris based body that advises industrialised nations on energy policies.
- IEA is made up of 30 member countries and eight associate nations.
- India is not a member of the IEA. In March 2017, India became an associate member.
- Membership in the IEA is restricted to advanced economy members of the Organization for Economic Co-operation and Development (OECD).
- The World Energy Outlook is published by IEA.

3. In India's context, which of the following statements is correct regarding heatwaves?

A The eastern and western coasts of India are most severely affected regions by heat waves so far.

B Heatwaves are traditionally found in Madhya Pradesh, Andhra Pradesh, Karnataka and Tamil Nadu.

C The India Meteorological Department (IMD) classifies heat waves according to regions and their temperature ranges.

D A heatwave is declared in the hilly area when the actual maximum temperature reaches at least 40°C.

Answer : C

Explanation

- A **heatwave** is a period of abnormally high temperatures, more than the normal maximum temperature that occurs during the summer season in the North-Western and South Central parts of India.
 - The **India Meteorological Department (IMD)** classifies heat waves according to **regions and their temperature ranges. Hence, option C is correct.**
- Recently, a study has found a spatial shift of heatwaves in India, now occurring in new regions in the country.
 - It also added that the **eastern and western coasts, which are currently unaffected by heatwaves, will be severely impacted in the future. Hence, option A is not correct.**
 - Also, heatwaves were **found in southern Madhya Pradesh, Andhra Pradesh, Karnataka and Tamil Nadu, where they would traditionally not take place. Hence, option B is not correct.**

- The heatwave is considered when the maximum temperature of a station reaches at least 40°C for Plains and **at least 30°C for Hilly regions. Hence, option D is not correct.**
 - An increase of 5°C to 6°C from the normal temperature is considered to be heat wave condition.

4. With reference to Ecological Threat Report, 2021, consider the following statements:

1. The report is published by the Institute of Economics and Peace (IEP).
2. It uses the relative severity of five indicators to build up the overall level of threat faced by a country.

Which of the statements given above is/are correct?

- A 1 only
- B 2 only
- C Both 1 and 2
- D None

Answer : C

Explanation

- The Report, “**Ecological Threat Report (ETR) 2021: Understanding ecological threats, resilience and peace**”, was released by the **Institute of Economics and Peace (IEP)**, an international think tank. **Hence, statement 1 is correct.**
- The ETR Report ranks countries on the basis of **ETR Score** which is an average of the five threats. It uses the **relative severity of five indicators** to build up the **overall level of threat** faced by a country. **Hence, statement 2 is correct.**
 - The 5 indicators are **food risk, water risk, rapid population growth, temperature anomalies and natural disasters.**
 - In **sub-Saharan Africa**, the score is influenced by **high levels of population growth**, which will place increased **pressure on existing food and lead to water scarcity.**
 - The **Report recommended** a policy to combine health, food, water, refugee relief, finance, agricultural and business development into **one integrated agency in high-risk areas and empowering local communities.**

- **Circular Economic Systems** are the systems that **reuse resources, reduce emissions and weed out the chemicals** and toxins that are causing millions of premature deaths – **all while creating jobs**.

5. Consider the following statements with respect to Kongka La

1. It is a pass that marks the Line of Actual Control between India and China.
2. It lies on a spur of the Pir Panjal Range that intrudes into the Chang Chenmo River Valley.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

Background

- Along the Line of Actual Control (LAC) between India in China, Indian Army has been given certain locations that its troops have to access to patrol the area under its control.
- These points are known as patrolling points, or PPs, and are decided by the China Study Group (CSG).
- CSG was set-up in 1976, when Indira Gandhi was the prime minister, and is the apex decision-making body on China.
- Barring certain areas, like Depsang Plains, these patrolling points are on the LAC, and troops access these points to assert their control over the territory.
- It is an important exercise since the boundary between India and China is not yet officially demarcated.
- PP15 and PP17A are two of the 65 patrolling points in Ladakh along the LAC.
- PP15 is located in an area known as the Hot Springs, while PP17A is near an area called the Gogra post.

Kongka La

- Hot Springs lies in the Chang Chenmo river valley, close to Kongka La.
- Kongka La is a low mountain pass on the Line of Actual Control between India and China in eastern Ladakh.

- It lies on a spur of the Karakoram range that intrudes into the Chang Chenmo Valley adjacent to the disputed Aksai Chin region.
- Both of these are close to the Chang Chenmo river in the Galwan sub-sector of the LAC in eastern Ladakh.

6. Consider the following pairs:

Nobel Prizes 2021	Recipients
1. Chemistry	Abdulrazak Gurnah
2. Economics	David Card
3. Literature	Benjamin List

Which of the pairs given above is/are correctly matched?

- A 1 only
- B 2 only
- C 2 and 3 only
- D 1, 2 and 3

Answer : B

Explanation

- The 2021 **Nobel Prize in Chemistry** was awarded to **Benjamin List** and David MacMillan for the development of asymmetric organocatalysis. **Hence, pair 1 is not correctly matched.**
- The **2021 Nobel Prize in Economic Sciences** has been awarded in one half to Canadian-born **David Card** and the other half jointly to Israeli-American Joshua D Angrist and Dutch-American Guido W Imbens. **Hence, pair 2 is correctly matched.**
- The **2021 Nobel Prize in Literature** has been awarded to novelist **Abdulrazak Gurnah** “for his uncompromising and compassionate penetration of the effects of colonialism and the fate of the refugee in the gulf between cultures and continents”. **Hence, pair 3 is not correctly matched.**

Mains Practice Questions

1. Identify the challenges involved in the implementation of micro-irrigation technology to promote water use efficiency in agriculture. (250 words)

Approach:

- Introduce by giving emphasis on water scarcity situations in India.
- Give the type and advantages of micro-irrigation technology.
- Identify challenges and give steps taken to resolve in way forward.

2. What are the challenges involved in developing the inland water transport in India and its advantages? What steps need to be taken to tap its potential? (250 words)

Approach:

- Introduce by giving potential of Inland water transport.
- Enumerate its challenges and advantages
- Suggest some steps needed to be taken to tap its potential.