CURRENT AFFAIRS WEEKLY

WEEK: 1 MAY 2022

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— Disclaimer —

The current affairs articles are segregated from prelims and mains perspective, such separation is maintained in terms of structure of articles. Mains articles have more focus on analysis and prelims articles have more focus on facts.

However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.

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SECTION: A
(MAINS)

CURRENT AFFAIRS

GLOBAL SECURITY INITIATIVE

CONTEXT:

◌ **Recently China announced to launch a new initiative, 'the Global Security Initiative' to counter the QUAD in the Indo-Pacific region.**

◉ BACKGROUND

- Indo –Pacific region remained a major focus not only in the contemporary times but from the historical times.

- Even during the **Colonial era**, the British followed the expansionary policy by colonizing various countries like India, Myanmar and Sri Lanka to have a strategic presence in the region.

- The Indian Ocean region and the Pacific Ocean region account for 60% of world trade.

How 'QUAD' came into picture?

- Chinese claims over the Indo-Pacific region gave a potential threat to **free navigation and overflight through the region.**

- As a response to increasing Chinese assertiveness, **USA-India-Japan-Australia** collaborated to form a grouping known as **QUAD.**

- Increasing cooperation of QUAD in the region gave a threat to the Chinese ambitions.

◉ ANALYSIS?

Why Indo-Pacific region remains so important?

The Indo-Pacific region is important from the global perspective because of three reasons:

- **Cluster of important economies:** Presence of the world's prominent economies USA, China, India and Japan are located in the region.

- **Economic contribution:** The Indo-Pacific region offers enormous economic opportunities, both at the product and factor markets—as the region approximately comprises of as many as 38 countries, accommodating 65 percent or 4.3 billion of the world population, and accounts for 63 percent of the world GDP.

- **Intra-region partnership:** There has been an increased vigour in intra-region partnerships within countries in the Indo-Pacific, and also with extra-regional actors to offset the intensifying presence of China.

- **Emerging economies:** New emerging economies like India, the Philippines and other ASEAN countries, including Asian tigers are Present in this region.

- **Eastern African Nations:** Indo-Pacific also covers the eastern boundaries of Africa, which has wealth of natural resources.

- **Maritime trade:** Above 50 percent of the world's maritime trade occurs in this region.

- **Marine resources:** The presence of many island nations and present of continental slopes provides a proper ground for many economic activities:

  ➤ Fishing

  ➤ Energy resources

  ➤ Generation of renewable energy

Why it is significant for India?

- **Cultural linkage:** India is the birthplace of several religions, and Buddhism is one of them. ASEAN countries located in this Indo-Pacific region have huge presence of Buddhists. India has historical cultural ties with these nations.

- **Colonial linkage**: India and many other nations of the region had a common colonial past, i.e. colonised by then European powers.

- **Strategic Perspective**: India has been the pre-eminent power in the Indian Ocean region and net security provider for many island states.

> **India's diplomatic participation in the region**
>
> ● India has been an enthusiastic participator in mechanisms that signify India's growing responsibility in the Indo-Pacific:
>
>   ➤ East Asia Summit (EAS)
>
>   ➤ Indian Ocean Rim Association (IORA)
>
>   ➤ Association of Southeast Asian Nations (ASEAN)
>
>   ➤ Defence Ministers Meeting Plus
>
> ● India has also been upholding the Free and Open Indo-Pacific (FOIP) approach and the Indo-Pacific Oceans Initiative (IPOI) apart from hosting multilateral naval exercise near the Andaman and Nicobar Islands
>
>   ➤ Exercise "Milan" (naval)
>
>   ➤ Exercise "Malabar" (naval)
>
>   ➤ "Tiger Triumph" military exercise

How China is playing in the Indo-Pacific region?

- China has taken several steps to secure its strategic presence and increase the status quo in the region, like the debt trap policy and territorial claims over international waters and islands.

- **Territorial claims on international waters:** China is losing its territorial claims in the South China Sea and conflict with other nations sharing the sea.

- **Claim over Taiwan:** Territorial and political claim over Taiwan is one of the major steps taken by China to secure its presence.

- **Military bases:** Military expansionism has emerged as one of the key themes of Chinese assertiveness. Opening and management of several dual purpose (Military and Civilian) ports, militarisation of hitherto unoccupied islands and artificial islands.

How China is playing in the region?

- China has always had a high trade volume with the major Indo-Pacific countries, and this has been rising.

- Over the years, Beijing has strengthened its economic ties with the Indo-Pacific nations.

- Countries such as **Australia, South Korea, and Japan** run a trade surplus against China, while India and Singapore run a trade deficit.

- In addition to enjoying a trade surplus, **Australia, South Korea, and Japan** has **China** as their largest
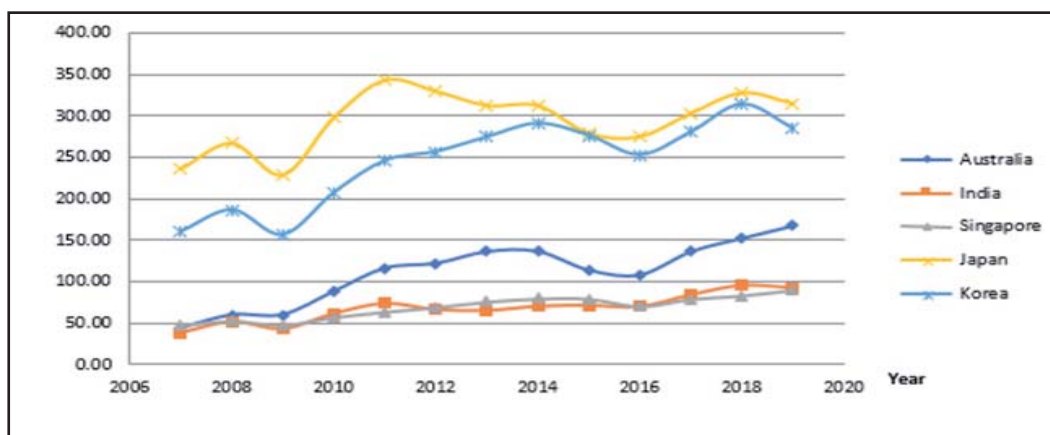
Source: Author's own, data from World Integrated Trade Solution (WITS), The World Bank

trading partner, and exports to China contributes significantly to their own economies.

◎ Therefore, despite political hiccups, it is extremely important for these countries to maintain economic harmony with Beijing—so that there is no consequential decline in Chinese demand for their commodities.

What is Global Security Initiative?

◎ An action plan is taken by China to counter the bloc and group politics in the Indo-Pacific region, e.g., QUAD and AUKUS.

What are the main objectives of the Initiative?

◎ Comprehensive, Cooperation and sustainable security in Indo-Pacific Region.

◎ Oppose unilateralism and say no to group Politics and blocs confrontation in the region.

◎ Build an Asian Security model of Mutual Respect, openness and integration.

How far this can impact the present grouping in this region?

◎ The main purpose behind the new initiative by China is to confront the USA hegemony in the Indo-Pacific region.

◎ Militarisation of the new initiative can put a major challenge not only to the USA but also to other nations sharing the borders in this region.

◎ Impact on Trade: Indo-Pacific region is also significant on the grounds of International trade via this region. The new initiative by China can provide China with a long arm strategy to pout barriers in this region.

◎ Threat to territorial Integrity: Many ASEAN countries are facing territorial disputes with China, which may be enhanced via this new policy.

◎ Threat to Democratic Ideals: Having a strategic presence in the region have the potential to give a threat to the democracy.

How this could impact India?

◎ **Territorial integrity:** Among the other nations of QUAD India is the only country which shares a land boundary with China. Territorial conflict between two nations remained at a central position in diplomatic relations between the countries.

◎ **Strategic Presence:** India is also trying to increase its strategic presence in the Indo-Pacific region to promote peace, security and free navigation in the international waters. A new security initiative can pose a threat to the strategic presence of India in this region.

◎ **Trade:** Despite territorial conflict and power aspirations in the region, China has always remained one of the largest trade partners for India. Countering the QUAD initiative will have a direct impact on India's trade balance with China.

◎ **Pharmaceuticals:** Apart from trade in other products India is also relying on China for its API components for pharmaceutical companies.

What will be the impact of rising power aspirations in this region?

◎ **Peace and stability:** Rising power aspirations from various countries may disturb the sovereignty and integrity of the nations in this region. Along with having a direct impact on maintaining peace in the region.

◎ **New Cold War:** Hegemony of China and the USA in the region and the power aspirations of these nations will give the scope for re-emergence of a new cold war in the region.

What steps India should take?

◎ **Non-Aligned stance:** India should maintain an equal distance from both nations. The relationship between USA and China both are important for India in various aspects. India should maintain a non-aligned relationship with both nations.

◎ **Panchsheel:** India should the promote the values of the Panchsheel Principles:

 ➤ Mutual respect's territorial integrity and sovereignty.

 ➤ Mutual non-aggression

 ➤ Mutual non-interference in each other's internal affairs

 ➤ Equality and mutual benefit

 ➤ Peaceful co-existence

◎ **Neighbourhood First Policy:** India should focus on the neighbourhood first policy to have a close relationship with the nations in the region.

◎ **SAGAR Doctrine:** Under SAGAR (Security and Growth for All in the Region) Doctrine India should collaborate with nations sharing the Indian Ocean.

◎ **Act East Policy:** India should enhance its cooperation with the eastern nations like ASEAN countries to maintain the status quo in the region.

◎ **South-south Diplomacy:** Most of the emerging economies share the Indo-Pacific region. India should focus on South-South diplomacy to collaborate with these emerging economies.

◎ **International and multilateral forums:** India should collaborate with other nations for securing a proper rule-based world order in the international waters.

- ◉ **Aatmanirbhar Bharat:** India should promote its domestic industries and exports, to reduce the dependence on other nations for essential imports.
- ◉ **Diversify the supply chain:** Diversification of the supply chain can reduce the dependency on a particular country.
- ◉ **AYUSH and Alternative medicines:** Ayush Scheme should be promoted so that our traditional medicines can be preserved and can reduce the use of API for pharmaceuticals. On this front government has introduced AYUSH Visa for treatment via Ayurveda and alternate medicines.

◉ CONCLUSION:

India Is the only country in the QUAD grouping which shares a land boundary with China, and the territorial disputes played an important role in deciding diplomatic relations between the two nations. India should be actively involved in world affairs and world trade and keep the idea of national interest and nation first policy to maintain a balance with every nation. To counter Chinese hegemony in the region India should actively engage in the QUAD grouping in various dimensions such as vaccine policy, energy security and soft diplomacy. Soft diplomacy and cultural linkages with other nations sharing the Indo-Pacific region could enhance India's strategic presence in the region.

Practice Question

1. Briefly explain the purpose of Global Security Initiative of China. Do you think Indo-Pacific region is becoming a breeding ground of New Cold War? Substantiate your answer.

2. Do you think 'Quad' can be transformed into an Asian NATO? Analyze the statement with respect to USA's and India's vision for Indo-Pacific region.

THREE-DAY EUROPE VISIT

- Prime Minister Narendra Modi was on his 'three-day three-nation' tour of Europe from May 2 to May 4. PM Modi visited three **European countries Germany, Denmark and France** during his visit.
- His three-day visit comes against the backdrop of Russia's invasion of Ukraine.
- **May 2:** PM Modi landed in Berlin, where he held bilateral talks with **German Chancellor Olaf Scholz.** The two leaders co-chaired the **sixth edition of the India-Germany Intergovernmental Consultations (IGC).**

- In 2021, India and Germany commemorated 70 years of the establishment of diplomatic relations and have been strategic partners since 2000.
- **May 3:** Prime Minister Narendra Modi reached Denmark. For the first time, he held a meeting with **Prime Minister Mette Frederiksen.**
- **May 4:** PM Modi met his counterpart in Norway, Sweden and Iceland on the sidelines of the **second India-Nordic summit.**

Which are the Nordic countries?

- The term 'Nordic' is derived from 'Norden' which means, the northern islands.
- The residents are known as 'Norbdo' which means in the literal term, 'northern dwellers'.
- A geographical and cultural region in Northern Europe and the North Atlantic are Nordic countries including **Finland, Iceland, Norway, Denmark, Sweden, and the Faroe Islands** (an archipelago of islands as an autonomous country within the kingdom of Denmark).

India's relationship with Nordic countries

- It said India and the Nordic countries affirmed their support for a rules-based international order and for multilateral institutions and their commitment to work towards making them more inclusive, transparent, and accountable with the aim of addressing global challenges more effectively.
- The Nordic states of Denmark, Norway, Sweden, Finland and Iceland have reported increased trade with India in recent years, accompanied by a swelling Indian diaspora.
- Interestingly, Finland and Norway share borders with Russia and have lately witnessed increasing tensions with Moscow over the Ukraine war.

INDIA-GERMANY RELATIONS

CONTEXT:

Germany and India signed a series of bilateral agreements focused on sustainable development that will see the South Asian nation receive 10 billion euros ($10.5 billion) in aid by 2030 to boost the use of clean energy.

◧ **The accords were signed during a visit to Berlin by Prime Minister Narendra Modi.**

◧ **Germany Chancellor Olaf Scholz is seeking to elicit India's support for the tough stance taken by Europe and the United States toward Russia over the war in Ukraine.**

◧ **PM Modi held bilateral talks with Chancellor Olaf Scholz and participated in the sixth round of Inter-Governmental Consultations (IGC) between the two countries.**

The Sixth German-Indian intergovernmental consultations

It is a discussion format that Germany conducts with only a few select partners.

• **Location:** Held in Berlin

  ➤ **Focus area:** global security policy issues, deepening of bilateral relations and climate crisis.

⊙ BACKGROUND

◉ Germany and India's diplomatic relations date back more than seven decades.

◉ In 1951, India was one of the **first countries to grant the Federal Republic of Germany diplomatic recognition** following the **Second World War.**

◉ Today, the countries are linked by a **strategic partnership**.

  ➤ One of its key pillars is their shared interest in strengthening multilateral cooperation and in promoting stability and security in the **Indo-Pacific region**.

◉ India is also **Germany's largest Global Development Partner.** This partnership, too, focuses on climate protection and mitigating the effects of global warming.

◉ Efforts here include expanding renewables, increasing energy efficiency and promoting a sustainable economy.

◉ In March 2021, the two countries celebrated 70 years of diplomatic relations.

Info

• Since 2011, bilateral intergovernmental consultations have been held every two years, alternately in Germany and India. The talks aim to further deepen the countries' many areas of bilateral cooperation.

⊙ ANALYSIS

Why India assumes significance for Germany?

◉ Since the independence Germany and India has maintained a historical ties in the skill development and technical development front. Post-independence, Nehru's visit to Germany paved the way for establishments of Indian Institute of Technologies (IITs).

◉ **Trade and commerce:** Germany is the largest trade partner in Europe and has a share of around 3% FDIs in Indian market. German trade with India, the world's second-most populous country with nearly 1.4 billion people, was less than 10% of its trade with China in 2021.

◉ **Strategic importance:** Germany considers India as one of the alternative to Chinese dominance in the south Asian region.

◉ **Military and security cooperation:** India is a central partner for German and European foreign policy in the Indo-Pacific. From the long-term perspective, it is considered the only country that could demographically and economically counterbalance China in the Indo-Pacific.

Germany was the second country after France to come forward with an Indo-Pacific strategy.

Key-takeaways from the Meeting

◉ Germany and India signed a series of bilateral agreements

◎ Germany committed to provide additional support worth euro 10 billion to India by 2030 to support green growth initiatives.

◎ India and Germany also agreed to work together on joint projects in third countries in an apparent signal to counter China's debt-driven infra financing model.

◎ India and Germany would be signing a migration and mobility agreement to facilitate two-way movement of students, professionals and researchers while addressing the challenges of illegal migration.

◎ Both the governments agreed to support each other's efforts to expand the internationalisation of their higher education systems, interlinking further the innovation and research landscapes of both countries, and strengthening dual structures for vocational education and training.

◎ **EU-India Trade and Technology Council:** EU-India Trade and Technology Council. The decision to set up a Trade and Technology Council will be the first for India with any of its partners and second for the European Union following the first one it has set up with the US.

◎ **Green and sustainable developments**: India and Germany both have agreed to navigate into the new pathways for green development and clean energy. Indo-Germany cooperation in green development will be guided by the commitments made under Parish Agreement and SDGs.

◎ **International Trade and WTO**: both the nations have promised to cooperate at WTO for its reform along with preserving the autonomy of two-tier appellate tribunal. Open, inclusive, free and fair trade are the shared objectives of the two nations.

◎ **India –EU FTA**: Germany has agreed to negotiate at EU for India-EU Free Trade Agreement.

◎ **Countering tax evasion**: Shared commitments in OECD Framework for Base Erosion and Profit Shifting to counter the tax evasions by multinational companies.

◎ **Health collaboration**: Both the nations have emphasized on ensuring security of medical supply chains, strengthening global preparedness for health emergencies and reducing future zoonotic risks, taking a One-Health-Approach.

◎ **Security Domain**: Countering terror financing and money Laundering both have agreed to work upon the Joint Comprehensive Plan of Action. Secure and safe cyber space are the major focused domain in the new technological revolution.

◎ **Humanitarian crisis**: both have agreed to respect the international rule and respect the territorial integrity and sovereignty of every nation, and protect the rights of the civilians. Peace and prosperity should be maintained by the nations.

◎ Other shared values at multilateral cooperation: India and Germany both have agreed strengthen ties at multilateral and regional level for effective and purposive reforms:

  ➤ UNSC reform to make more purposive and reflective of contemporary issues.

  ➤ Free, open and inclusive Indo-Pacific region.

  ➤ Preserving the centrality of the ASEAN in the region

  ➤ India at G7: Germany has welcomed the step to invite India in the G7 summit.

How these agreements benefit India?

◎ **Green Initiatives**: At the climate change and green development initiative India will be get the impetus and technological support, which will help to achieve the targets of SDG and Paris agreement.

◎ **Waste management and circular economy**: Swacch Bharat Abhiyaan initiated by India on the principles of clean India will get a supporting hand to improve the infrastructure for waste management system and diversify the system into a circular economy.

◎ **Rural and Agro economy**: Collaboration in the agricultural front will give a scope for Indian farmers to diversify their source of income and promote a sustainable agro economy.

◎ **Trade and taxation**: Framework under OECD to prevent BEPS will give a boost to the revenue collection from the multinational companies. Diversification of supply chain and markets have the potential to provide a broader base for supply and wide market accessibility to provide a safe cushion to any unpredictable international shocks.

◎ **Smart City Initiatives**: Policy framework for Sustainable Smart City and proper implementations for the projects to avoid and mitigate the diastral risk will be assisted by the German Expertise.

◎ **Representation at Multilateral and international forums**: India's invitation to the G7 summit is has been welcomed by the Germany which gave a High Ministerial position to India at International Forum. Collaboration at UNSC will provide a support to get a better representation.

What shall be done more?

◎ **Data Security and Protection**: India should follow and maintain the data security measure in accordance with European standards to have safe and secure line for digital cooperation.

- **Trade policy measure**: More inclusive and transparent policy to be ensured to get the benefits of foreign investors and securing the interests of the domestic investors.

- **Regional Cooperation**: India's foremost focus should be strengthening regional cooperation like BIMSTEC to secure the strategic position the region.

- **Dispute resolution and arbitration**: India should look upon its dispute resolution and arbitration process and make it more effective and responsive.

⊙ CONCLUSION:

India Germany shares historical ties since independence on the field of skill developments and technical institution. Though India and Germany have a strong strategic partnership, in the new contemporary issues of geo politics it's become mandatory to reframe the partnership structurally.

Inter-Governmental Consultation in which India has participated and co-chaired the council with Germany has paved a new path for comprehensive and inclusive ties. From territorial space to cyber space both the nations shared the common interest of safe and security respecting the international law and sovereignty of every nation. Peace and stability with clean environment are necessary conditions for the human development and human rights.

Practice Question

1. Indo-German Strategic Partnership is based on the common values and principles. Discuss how Indo-German collaboration on various geo-political and economic issues can help create a mutually beneficial partnership for both the countries.

2. Ties between India and Germany have been strengthening over the years but there is still vast potential that remains untapped. Comment.

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INDIA DENMARK & THE EVOLVING RELATIONSHIP

CONTEXT:

○ Indian Prime Minister visited Denmark with its counterpart. During the visit, both the nations have signed 9 documents to enhance the bilateral relations. While the summit covered a wide array of issues, the Green Strategic Partnership remains the central new agreement in this budding bilateral relationship.

⊙ BACKGROUND:

○ India and Denmark already have strong trade and investment ties, with more than 200 Danish companies present in India and over 60 Indian companies present in Denmark, but the Partnership is broadening and deepening the India-Denmark relationship, especially in sustainable development.

○ Historically, the relationship between these countries has actually been somewhat tense, in particular thanks for the saga of a Danish citizen being accused of a massive arms drop in Purulia, West Bengal in 1995.

○ Since then, India repeatedly tried to get him extradited, and even came close, until the Danish Supreme Court stayed the order – claiming there was a risk of him being tortured in India – in 2011.

○ This triggered a diplomatic crisis between two countries which hammered economic relations.

○ But since then, there have been joint diplomatic engagements leading to improved terms between the two countries – culminating with the **Green Strategic Partnership.**

○ Green Strategic Partnership is a chance for India to accelerate its partnership with Denmark and broaden it to cooperation in other areas.

⊙ ANALYSIS

○ The two PMs reviewed the bilateral **Green Strategic Partnership** between their two nations and decided to ramp up trade ties and cooperation in green energy and combating climate change.

○ The two nations signing nine pacts in diverse fields such as

➤ Migration and mobility

➤ Cultural ties

➤ Shipping

➤ Fisheries, Animal husbandry and Dairy

➤ Skill development

➤ Start ups

➤ Water management

➤ Energy policy

➤ Health and biotechnology

Soft power and People to People contact.

○ Both the Prime Ministers have agreed to enhance the people to people contact and improve cultural ties.

○ Both nations have welcomed the signing of a new **Cultural Exchange Program.**

○ **Declaration of Intent (DoI) on Migration and Mobility** has been introduced during the visit to Denmark.

Trade and investments:

○ The two Prime Ministers underlined the importance of bilateral trade and investments and stressed the need to maximize the potential of economic ties between the two countries.

○ To ensure economic security and prosperity of the people two nations have emphasized on **robust bilateral investment** through diversified, resilient, transparent, open, secure and predictable global supply chains.

○ **Indian Green Finance Initiative** has been launched to finance the India's green projects to accelerate green growth and job creation.

○ Both the nations have also signed a **Letter of Intent (LoI) in green shipping.**

○ In order to diversify the rural economy two countries welcomed the step to sign **JointDeclaration of Intent (JDI)** on Cooperation in the fields of **Animal Husbandry and Dairying.**

Climate change:

○ At the climate change front, both have launched a new green climate initiative, **India's GreenFinance Initiative** to finance Indian green project to enhance the green growth and job creation.

○ Collaboration in the fields of **urban and rural water supply, groundwater mapping, wastewater management, river rejuvenation and digitalization.**

- **Launch of Energy Policy Dialogue** at Ministerial level has been proposed by both the nations to collaborate at climate front.

- **Letter of Intent (LoI)** of between Ministry of Jal Shakti and Ministry of Environment of Denmark has been introduced to develop waste water management system.

Health and bio technology:

- The two sides confirmed their continued collaboration in the field of antimicrobial resistance. India conveyed its acceptance of the Danish invitation to join the **International Center for Antimicrobial Resistance Solutions (ICARS)** as Mission Partner.

- **Global Digital Health Partnership** on India's invitation to improve public health and well-being through evidence-based digital technologies.

How these agreements can benefit India?

- **Energy sector:** Initiatives on green and clean energy could reduce the dependency on fossil fuels and can enhance the production of hydrogen fuel and energy security through renewable energy.

- **Demography:** Health management and skill development as promised y the both the nations will enhance knowledge exchanges which have the potential to build up a better condition for demographic dividend.

- **Climate change and environment:** India's' hurdle for waste management system and water management system could be reduced with the help Danish initiatives. Swacch Bharat mission could get a boost and could ensure clean environment for all.

- **Health sector:** Diversification of health supply chain and medicinal requirement could reduce the threat for future supply chain shocks and reduce the dependency on a single supplier.

- **Supply chain blockades:** Both have agreed to diversify the supply chain system to prevent the future shock in the trade and business and economic disruptions.

What India should focus to improve the bilateral ties?

- **Demographic development:** To utilize the fruits of the new relation India should focus on its demographic development for better health educational facilities.

- **Trade barriers:** India should also revisit the regulation on trade barriers and ensure proper inflow of foreign trade along with protecting the interests of the domestic producers.

- **Agricultural and Primary Infrastructure:** In order to secure the economic security of the rural households India should develop its agricultural infrastructure like post-harvest management along with proper port accessibility to all the produces and improved transportation system and cold storage system.

- **Aatmanirbhar:** To maintain the trade balance between the countries India should focus on its Self-Dependency and actively engage in World trade.

- **Ayurveda and Alternate medicines:** India should work on conventional medicines and develop infrastructure for alternate medicines to diversify the medical and pharmaceutical sector.

◉ CONCLUSION:

Recent visit of Indian Prime Minister to Denmark has initiated a new chapter not only in the bilateral relations of the two nations but also at multilateral fronts. Green initiatives and improvement in trade relation along with promotion of startups will give a push in the field of green and renewable energy and reduce the dependency on fossils fuels. Collaboration at various dimensions will diversify the supply chain system which can be more predictable and reliable.

Practice Question

1. Green Strategic Partnership between India and Denmark will help in delivering sustainable solutions to various challenges faced by India.

2. India-Denmark partnership can work as a launch pad for India to strengthen its ties with other Nordic countries. Elucidate.

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FREEDOM OF PRESS IN INDIA

CONTEXT:

- **Reporters Without Borders (RSF) had on the World Press Freedom Day (WPFD) i.e. 3rd May, published the 20th edition of the World Press Freedom Index.**

BACKGROUND:

- Every year since 2002, Reporters Sans Frontieres (RSF) or Reporter Without Borders, publishes World Freedom Index.

- This year RSF published the 20th edition of World Press Freedom Index.

- India stood at 150th position amongst 180 countries in the Index published this year i.e. 2022.

World Press Freedom Day:

- UN General Assembly in the year 1993 had adopted a resolution to observe 3rd May every year as World Press Freedom Day.

- It was also on the same day that UNESCO had adopted the Windhoek Declaration is aimed at development of a Free, Independent and Pluralistic Press.

- Theme of World Press Freedom Day 2022 was "Journalism under Digital Siege".

What is World Press Freedom Index?

- Published every year since 2002 by Reporters Without Borders (RSF), the World Press Freedom Index is an important advocacy tool based on the principle of emulation among states.

- Reporters Without Borders: is an international non-profit and non-governmental organization with the stated aim of safeguarding the right to freedom of information.

- It describes its advocacy as founded on the belief that everyone requires access to the news and information, in line with Article 19 of the Universal Declaration of Human Rights that recognizes the right to receive and share information regardless of frontiers, along with other international rights charters.

- RSF has consultative status at the United Nations, UNESCO, the Council of Europe, and the International Organisation of the Francophonie.

- The Index ranks 180 countries and regions according to the level of freedom available to journalists.

- It is a snapshot of the media freedom situation based on an evaluation of pluralism, independence of the media, quality of legislative framework and safety of journalists in each country and region.

What is the Scoring Criteria?

- The Index's rankings are based on a score ranging from 0 to 100 that is assigned to each country or territory, with 100 being the best possible score (the highest possible level of press freedom) and 0 the worst.

What criteria are taken into consideration for evaluating Press Freedom of any country?

- Press Freedom of any countries is evaluated using the following criteria:
  - ➤ Political context
  - ➤ Legal framework
  - ➤ Economic context
  - ➤ Sociocultural context
  - ➤ Safety

What are the finding of World Press Freedom Index 2022?

- It has been stated in the report of the index that there has been two fold increase in the polarisation of media which is a cause for creation of division inside the countries and amongst the countries at international level.

Who are the top performers according to this Index?

- Norway (1st Rank)
- Denmark (2nd Rank)
- Sweden (3rd Rank)
- Estonia (4th Rank)
- Finland (5th Rank)

Which country lies to the bottom?

- North Korea stood at Rank 180 i.e. at the bottom of the table.

- Russia on the other hand stood at 155th position.

What is the position of India and its neighbours on the Index?

- As per the Press Freedom Index, 2022, India has slipped from 142nd to 150th position.

- The index has placed Pakistan at 157th position, Sri Lanka 146th, Bangladesh 162nd and Myanmar at 176th position.

- While China stands at 175th rank.

What have been the reasons for the fall of India's position in Press Freedom Index?

- India's position has consistently fallen on the Press Freedom Index since 2013 when it was placed on 133rd position.

- Reasons for India's poor performance on the Press Freedom Index are:

- Increased violence against journalism

- Rise in politically partisan media.

Practice Question

1. India's ranking on Press Freedom Index reflects the growing threat to freedom of press. Examine. Also, discuss what reforms are required to ensure media functions effectively as the fourth pillar of democracy?

2. Critically examine the role played by media in facilitating good governance.

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OPEN PRISON FOR WOMEN

CONTEXT:

- Tamil Nadu's Minister for Law, Courts, Prisons and Prevention of Corruption recently said the government would consider setting up an open prison for women.

⊙ BACKGROUND

- The philosophy on the basis of which the 'open prison' exists is reflected in the two dictums of **Sir Alexander Paterson.**
    - ➤ **First**, a man is sent to prison as punishment and not for punishment.
    - ➤ **Second,** one cannot train a man for freedom unless conditions of his captivity and restraints are considerably relaxed.
- The need for having open penal and correctional institutions was recognised and extensively discussed in the first **United Nation Congress on the Prevention of Crime and the Treatment of Offenders** held in Geneva in 1955.
- The **United Nations Standard Minimum Rules for the Treatment of Prisoners**, popularly known as the **Nelson Mandela Rules**, laid down the objectives of open prisons stating, that such prisons provide no physical security against escape but rely on the **self-discipline** of the inmates, provide the conditions most favourable to the rehabilitation of carefully selected prisoners.
- The **All-India Committee on Jail Reform** constituted in 1980 recommended the government to set up and develop open prisons in each state and UT.

⊙ ANALYSIS

What are open prisons?

- Open prisons have relatively less stringent rules as compared to the controlled jails.
- They go by many names like minimum-security prison, open air camps or prison without bars.
- The fundamental rule of an open prison is that the jail has minimum security and functions on the self-discipline of the inmates.
- The jail does not confine them completely but requires them to earn their living to support their families, living with them inside the jail.
- Prisoners can move out of the prison for their work and are supposed to come back to the prison campus after their working hours.

- Every state in India has a prison law, like the Rajasthan Prisoners Rules and Andhra Pradesh Prison Rules, 1979. Seventeen states are reported to have functional open jails with Rajasthan having 31 such prisons, the highest that any state has.

Who are eligible for open prisons?

- Every state law defines the eligibility criteria of inmates who can be in an open prison.
- The principal rule is that an inmate eligible for open air prison has to be a convict.

What are the benefits of open prison?

- It will reduce overcrowding and operational costs of prison administration.
- It will reduce the psychological pressure and lack of confidence among prisoners when they assimilate into society.
- It goes with the repeated call to develop a humane attitude and reformative approach towards the offenders in society.

Criticisms of the Open Jails in India

- **Under-Utilisation**: Open Prisons are under-utilised. These prisons have a capacity to accommodate 25776 prisoners however, only 3786 prisoners are currently in these prisons (as of 2015).
- **Lack of accountability:** In most states a committee select prisoners and are not expected to provide reasons for their selections. Thus, they have no accountability which leads to partiality and corruption.
- **Applicability:** There is no provision of Open Jails for under-trial prisoners.
- **Inadequate Open Prisons**: Some states are concentrated with Open Prisons while some have just one and no Union Territory in India has an Open Prison. Due to the state list subject, this inequality exists among different states.
- **Outdated laws:** The rules and laws governing the selection and administration are extremely old and thus unfit for the present situations.

About Prisons System in India:

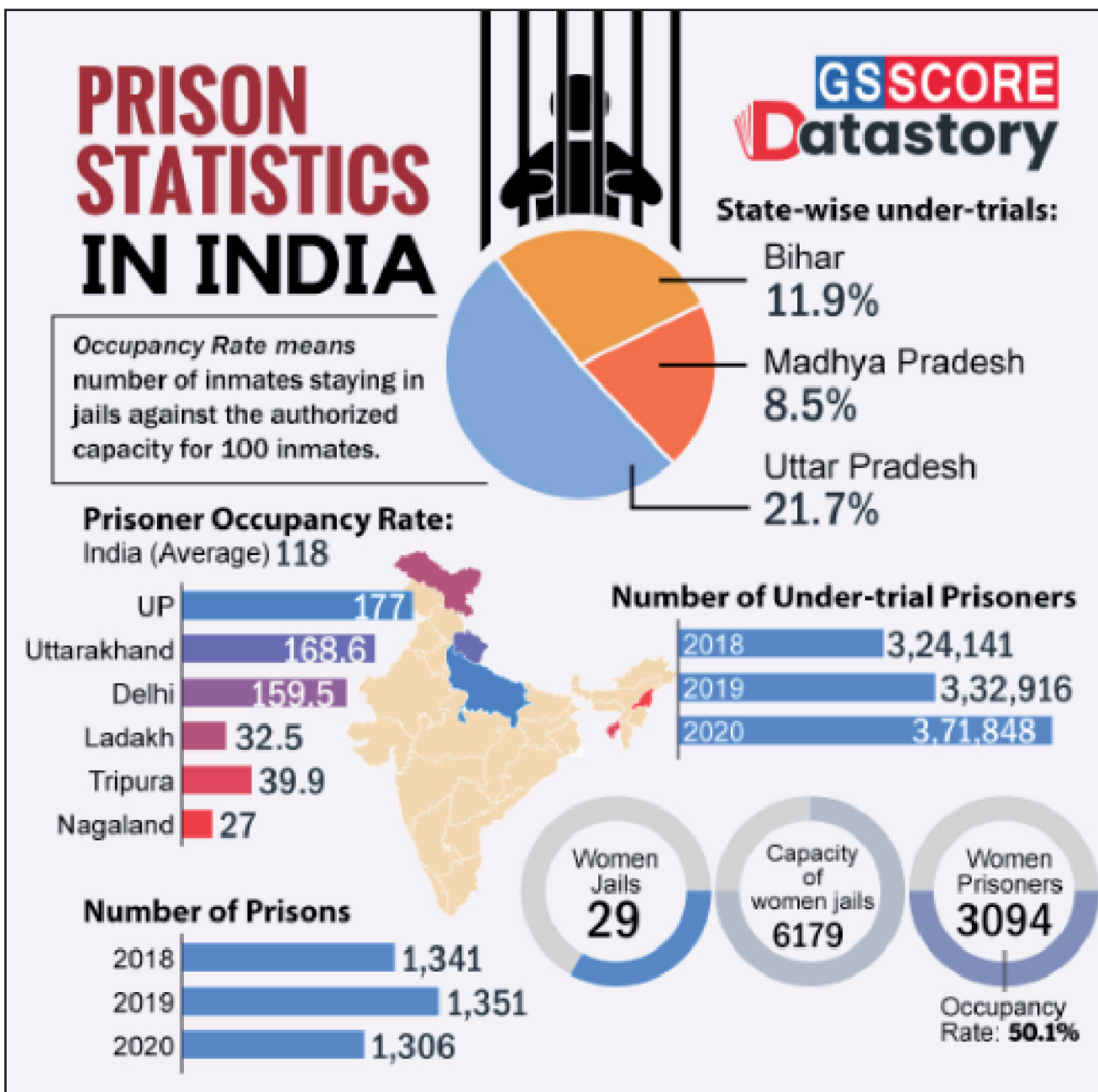- Prisons, as penal and correctional institutions, have

existed in India and abroad since times immemorial. Prisons confine criminals, convicts and under-trials.

◉ The primary purpose of prisons is to isolate or alienate such people from the society.

◉ They are jailed for a certain period but the purpose of reformation and rehabilitation is sometimes defeated due to the prison environment and the treatment meted out to prisoners.

◉ The administration and management of the modern prison system in India is governed by the **Prisons Act of 1894**, which has its origins in the recommendations of the **"Prison Discipline Committee"** appointed in 1836 by **Lord Macaulay**,

followed by constitution of four jail commissions to review the system from time to time.

Prison Statistics in India

◉ As on 31st December, 2020 there were more than 1,300 Jails in the country.

◉ State of **Rajasthan** has the highest number (145 out of 1,306) of jails among the States/UTs followed by Tamil Nadu (142), Madhya Pradesh (131), Andhra Pradesh (106), Odisha (92) and Uttar Pradesh (73). These six States together cover 52.8 % of total jails in the country.

◉ The highest number of under-trial prisoners were lodged in District Jails (50.0%, 1,86,089 under-

PRISON STATISTICS IN INDIA

Occupancy Rate means number of inmates staying in jails against the authorized capacity for 100 inmates.

State-wise under-trials:
- Bihar 11.9%
- Madhya Pradesh 8.5%
- Uttar Pradesh 21.7%

Prisoner Occupancy Rate:
India (Average) 118

UP	177
Uttarakhand	168.6
Delhi	159.5
Ladakh	32.5
Tripura	39.9
Nagaland	27

Number of Under-trial Prisoners
2018	3,24,141
2019	3,32,916
2020	3,71,848

Number of Prisons
2018	1,341
2019	1,351
2020	1,306

Women Jails 29

Capacity of women jails 6179

Women Prisoners 3094
Occupancy Rate: **50.1%**

- trials) out of total 3,71,848 under-trials followed by Central Jails (36.1%,1,34,322 under-trials) and Sub Jails (11.9%, 44,402 under-trials) as on 31st December, 2020.

- The country's jails are crowded to 118% of their capacity, with a count of 4.33 lakh prisoners against a capacity of less than 3.81 lakh.

- The ratio between the prison staff and the prison population is approximately 1:7.

- Prisons Statistics of India (PSI) 2020 puts the percentage of under-trials at 76% in December 2020:

Major Issues related to Prisons in India

- **Overcrowding:** One of the primary reasons for overcrowding of prisons is pendency of court cases. Overcrowding affects the already constrained prison resources and renders separation between different classes of prisoners difficult.

- **Under-trials:** Two of every three prison inmates in the country are under-trials. The share of the prison population awaiting trial or sentencing in India is extremely high by international standards. For example, it is 11% in the UK, 20% in the US and 29% in France.

- **Corruption and extortion:** Extortion by prison staff is common in prisons around the world. In exchange for contraband or special treatment, inmates supplement guards' salaries with bribes. Powerful inmates in some facilities in India enjoy cellular phones, rich diets, and comfortable lodgings, while their less fortunate brethren live in squalor.

- **Lack of legal aid:** Lawyers in India are poorly paid and are often over-burdened with cases. Further, there is no monitoring mechanism to evaluate the quality of legal aid representation in most states.

- **Unsatisfactory living conditions:** Overcrowding itself leads to unsatisfactory living conditions. Moreover, prison structures in India are in dilapidated condition. Lack of space, poor ventilation, poor sanitation and hygiene make living conditions deplorable in Indian prisons. Mental health care has negligible focus in Indian prisons.

- **Shortage of staff:** In the absence of adequate prison staff, overcrowding of prisons leads to rampant violence and other criminal activities inside the jails.

- **Torture and Sexual abuse:** Prisoners are subjected to inhuman psychological and physical torture. Sexual abuse of persons in custody is also part of the broader pattern of torture in custody.

- **Custodial deaths:** In 2015, a total of 1,584 prisoners died in jails. A large proportion of the deaths in custody were from natural and easily curable causes aggravated by poor prison conditions. There also have been allegations of custodial deaths due to torture.

- **Underpaid and unpaid labour:** Labour is extracted from prisoners without paying proper wages.

- **Inadequate security measures and management:** Poor security measures and prison management often leads to violence among inmates and resultant injury and in some cases death.

- **Condition of women prisoners:** Women prisoners face number of challenges including poor nutritional intake, poor health and lack of basic sanitation and hygiene. There are also alleged instances of custodial rapes which generally go unreported due to the victims' shame and fear of retribution.

- **Discrimination:** According to Humans Rights Watch, a "rigid" class system exists in the Indian prisons. There is rampant corruption in the prison system and those who can afford to bribe, often enjoy luxuries in prison. On the other hand, socio-economically disadvantaged prisoners are deprived of basic human dignity.

- **Lack of reformative approach:** Absence of reformative approach in Indian prison system has not only resulted in ineffective integration with society but also has failed to provide productive engagement opportunities for prisoners after their release.

- **Lack of Mental Health Professional:** There was only one mental health professional for every 21,650 prisoners in 2016, with only six States and one Union Territory having psychologists / psychiatrists.

Measures taken by the Government

- **Modernization of Prisons scheme:** was launched in 2002-03. Various components included construction of new jails, repair and renovation of existing jails, improvement in sanitation and water supply etc.

- **E-Prisons Project:** The E-Prisons project aims to introduce efficiency in prison management through digitization. The availability of these details on an electronic platform will be useful to track the status of prisoners and smooth functioning of the prison system.

- **Model Prison Manual 2016:** The manual provides detailed information about the legal services (including free services) available to prison inmates.

- **National Legal Services Authority:** It has launched a web application recently to facilitate the under trial prisoners with free legal services and make the legal services system more transparent and useful.

- **Draft National Policy on Prison Reforms and Correctional Administration:** Its key provisions include:

  ▸ Amending the Constitution to include principles of prison management and treatment of under trials under DPSP and including prisons in concurrent list.

  ▸ Enactment of uniform and comprehensive law on matters related to prisons.

  ▸ A department of Prisons and Correctional Services to be opened in each state

  ▸ State shall endeavour to provide alternatives to prisons such as community service, forfeiture of property, payment of compensation to victims, public

  ▸ State shall improve the living conditions in every prison and allied institution.

Major Committees related to Prison Reforms

- **All India Prison Reforms Committee, 1980 (Mulla Committee):** The Government of India set-up this Committee with the basic objective to review the laws, rules and regulations for protecting society and rehabilitating offenders. The Mulla Committee submitted its report in1983.

- **Krishna Iyer Committee, 1987:** The Government of India set-up this Committee to undertake a study on the situation of women prisoners in India. It has recommended induction of more women in the police force in view of their special role in tackling women and child offenders.

- **Justice Amitava Roy panel, 2018:** Supreme Court's newly constituted Justice Amitava Roy panel will look into various matters including over-crowding in prisons and the issues concerning women prisoners.

Required Measures

- **Immediate attention:** The issue of overcrowding in Indian jails requires an immediate attention. Sincere efforts should be made to improve living conditions which include better sanitation and hygiene, adequate food and clothing.

- **Focus on reformation:** Efforts should be made to reform offenders in the social stratification by giving them appropriate rehabilitation and correctional treatment. Initiatives should be taken to impart vocational training to prisoners and ensure proper rehabilitation and social

- The government must take initiative to improve the conditions of under-trial prisoners which can achieved by speeding of the trial procedure, simplification of the bail procedure and providing effective legal aid.

- It is also important to address the issue of inadequate prison management by recruiting more prison staff, imparting proper training and undertaking modernization of prisons.

- Issues related to custodial violence and sexual abuse should be dealt with effective monitoring and stringent punishments of those involved in such violence.

- The concept of open prisons should be encouraged more as a correctional facility.

⦿ CONCLUSION

Prisons' constitute important institutions which protects the society from criminals. To improve prison conditions does not mean that prison life should be made easy, it means, it should be made humane and sensible.

Practice Question

1. Briefly explain the concept of open prisons? Also, examine their significance in humanising criminal justice system.

2. Prisons Statistics of India (PSI) provides a grim picture of the prisons in India. In the backdrop of inhuman conditions in Indian prisons, discuss the need to relook at the prison system in India.

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WOMEN AND PUBLIC HEALTH SERVICES IN INDIA

CONTEXT:

- Women are at the forefront of the government's drinking water initiative in the Bihar.

- Recently, reports highlighted the progressive approach of the Bihar government towards empowering women and involve them under various public health schemes ongoing in the state.

⊙ BACKGROUND

- Bihar's budget 2022-23 focused on the agenda such as **Water, Agriculture, health, sanitation and education.**

- According to the state government's vision for rural development and water availability and sanitation, women play an important role.

- Hence there role was analysed for such **public health services in the state**.

⊙ ANALYSIS

Status of women and health services in Bihar

- **Mortality Rate:**
  - ➤ **SRS, 2019:** As per **Sample Registration Survey (SRS),** 2019 estimates, **the infant mortality rate** in Bihar has been recorded as **29 deaths per 1,000 live births**.
    - It is a reduction by three points from the 2018 estimates and is one point better than the national average of 30 deaths per 1,000 live births.
  - ➤ **NFHS-5:** Similarly, as per **National Family Health Survey (NFHS-5) estimates**, mortality rate for children under-5 years of age stands at 56.4 deaths per 1,000 live births.
  - ➤ The state is one among the least developed and cases reported for infant and maternal mortality was high too.

- **Better availability of public health services**
  - ➤ It also indicates better availability of other public health services such as **safe water, sanitation, and hygiene.**
  - ➤ Now Bihar has been able to provide tap water to 1.56 crore households out of the targeted 1.72 crore rural households.
    - This is a remarkable achievement in the last five years considering the low coverage **of 3% with which the State started.**
    - Bihar has provided the highest number of tap connections in the last few years among all the States in India.

How Bihar has achieved this 'remarkable change'?

- **Structural changes**: In programme implementation, structural changes were initiated to divide the responsibility of water provisioning between the **Public Health Engineering Department and Panchayati Raj Department.**
  - ➤ The State government has gone for a better service benchmark of water availability to person per day by tapping the available ground water.

- **Sustainable source of water**: To ensure source sustainability, Bihar launched the **Jal-Jeevan-Hariyali Mission** for ground water recharge and efficient use of it through **changing crop pattern, irrigation methods, large scale plantation and revival of traditional water harvesting and recharge structures.**

- **JAL-JEEVAN-HARIYALI Mission (JJHM),** an autonomous body registered under the Societies Registration Act 1860, under Rural Development Department, Govt. of Bihar.

- The Society is under overall administrative control of the State Government.

- This is an ambitious multi stakeholder programme with the objective of climate sustenance, conservation and rejuvenation of water bodies and to keep water pollution free, maintaining level of Ground water, ensuring adequate water availability, climate resilient agriculture, energy conservation etc. and promoting climate awareness among the masses.

- **Women's participation**: The State Government of Bihar has been experimenting with remarkable success in implementing various initiatives that provide women a chance to come forward to have a democratic dialogue in water provisioning.
  - ➤ The government has made provisions to include at least three women members in the ward level committees that are formed to manage ward-level piped water schemes across 1,14,691 rural wards in the State.

- ◉ **Democratic and gender neutral decentralization**: There are now more than three lakh women who are a part of these committees.

- ◉ Further, more than **25,000 women** are also working as **pump operators** especially in areas where implementation is done by ward implementation and management committee (WIMCs). These women are leading from the front the great turnaround **story of drinking water in the State.**

What are the Challenges Involved in Gender and Sanitation?

As per the census 2011, more than fifty percent of India's population defecated in the open, and recent data showed that about 60% of rural households and 89% of urban households have access to toilets.

- ◉ **Weak Participation and Proxy for men:** In practice, the promoters of *Swachhta* rarely encourage women to participate in water and sanitation committees, which does not guarantee their participation.

  - ➤ Further, the age, position in the family, and societal and cultural barriers for females are some of the factors that determine the participation of women in sanitation decision-making.

- ◉ **Gender-Based Sanitation Insecurity:** There is a disproportionate burden faced by women especially shortage of or the non-availability of sanitation facilities that can be also called "Gender-based sanitation insecurity."

  - ➤ The desire for privacy during bathing and defecation is different in the case of girls and women than men.

  - ➤ Thus, the non-availability of proper sanitation facilities creates a helpless situation for females and leads to the risk of faucal-orally transmitted diseases, urogenital tract infections, urinary incontinence, and chronic constipation.

- ◉ **Risks Involved With Open Defecation:** Women face threats to their life and feel unsafe while seeking a toilet facility or while going out for open defecation.

  - ➤ This leads to the consumption of less food and water by the women to minimize the need to exit the home to use toilets.

  - ➤ The risk involved with feeling unsafe while searching a place to go often to the toilet after dark or early in the morning; and dropping out of school at the onset of menstruation due to a lack of safe and private disposal facilities.

- ◉ **Taboo:** Menstrual hygiene education is taboo in India. Women find it difficult to openly ask for

sanitary products from a male family member. Women, especially in rural areas, are confined to their homes and depend on male or elderly female household members for procuring sanitary products.

Important initiatives

- ◉ **Odisha:**In Odisha, **women and transgender Self-Help Groups (SHGs)** have been engaged in the operation and maintenance of treatment facilities in eight cities;

- ◉ **Jharkhand**: In Jharkhand, trained women masons built over 15 lakh toilets in one year, and the state was declared open defecation free (rural) much ahead of the national cut-off date of October 2, 2019.

Small deeds

- • **Motivation:** Uttara Thakur, a differently-abled panchayat head from Chhattisgarh, was determined to improve sanitation services in her village. She went door-to-door to motivate people to use toilets. Her contagious spirit mobilised the whole village to join hands and become open-defecation free.

- • **Main KuchBhiKar Sakti Hoon**, a Doordarshan TV series promoted by PFI, used entertainment-education around safe and sustained sanitation practices to improve people's awareness and promote shifts in social and gender norms around the use and maintenance of toilets. This reached 200 million viewers, nearly 45 per cent of whom reportedly took some action or promised to.

- ◉ The **India Sanitation Coalition** is committed to looking at these reforms through a **gender lens** to ensure unintended biases do not creep in.

- ◉ **UN Committee on Economic, Social and Cultural Rights, Statement on the Right to Sanitation, 2010** was made the right to sanitation is an essential component of the right to an adequate standard of living, enshrined in **Article 11** of the International Covenant on Economic, Social and Cultural Rights.

National Effort towards Sustainable Sanitation

- • **Central Rural Sanitation Programme (CRSP) 1986**, primarily with the objective of improving the quality of life of the rural people and also to provide privacy and dignity to women.

- • **Swachh Bharat Abhiyan** or the **"Clean India Campaign"** is the biggest ever cleanliness drive in the country.

- ➤ The goal now is to achieve **Swachh Bharat by 2019,** as a tribute to the **150th Birth Anniversary of Mahatma Gandhi,** by improving the levels of cleanliness in rural areas and making Gram Panchayats **Open Defecation Free (ODF).**
- SBM became the world's largest sanitation program by changing the behaviour of hundreds of millions of people with respect to toilet access and usage.
  - ➤ National Urban Sanitation Policy
  - ➤ National Water Policy
  - ➤ National Rural Health Mission
  - ➤ National Urban Health Mission
  - ➤ National Policy on Faecal Sludge and Septage Management (FSSM)

◉ CONCLUSION

The right to sanitation has been recognised in India at different levels. From the perspective of the Constitution of India, sanitation is a fundamental right. The Supreme Court and different high courts have interpreted the fundamental right to life to include the right to sanitation. However, the contents of the right, related duties and a mechanism to ensure remedies and accountability are yet to be elaborated through a statute. The absence of details in laws has led to the regulation and governance of the sanitation sector in India through policies, programmes and schemes that do not speak the language of rights and do not guarantee any accountability mechanism. Therefore, it is high time that the option of a specific statutory framework on sanitation that is based on the idea of right to sanitation is explored. Such a statutory framework should lay down principles and norms to guide the implementation of sanitation programmes and schemes.

Practice Question

1. Discuss the importance of Water, Sanitation, and Hygiene (WASH) for reducing child and maternal mortality.

2. "According to NITI Aayog report, India is suffering from the worst water crisis in its history, and almost 600 million people are water-deprived." In light of the statement, discuss the issues associated with the water governance.

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DELHI DUAL GOVERNANCE CONUNDRUM

CONTEXT:

- **Supreme Court has referred the power tussle controversial law to a constitutional bench to get the constitutional interpretation and a five judge bench has given a verdict on the power tussle issue**

⊙ BACKGROUND:

- Delhi is placed as a union Territory under **Schedule 1** of the Constitution.

- **69ᵗʰ Constitutional Amendment Act, 1991** has given the constitutional backing to the appointment of Lieutenant Governor and its functions.

- **National Capital Territory of Delhi Amendment Act 2021** has been introduced by the Parliament which has created the window more power tussle.

- The wide ranging power tussle has been in the backdrop of failure and disruption in the constitutional ideals.

- Supreme Court has referred the **National Capital Territory v/s Union of India** case to the constitutional bench.

⊙ ANALYSIS

What is the present governing structure of Delhi?

- 69ᵗʰ Constitutional Amendment Act, 1991 has inserted **Article 239AA**, which declared territory of Delhi to be administered by the **Lieutenant Governor (L-G)** on the aid and advice of the elected legislative council.

  ▸ L-G is to be appointed by the Union Government.

- Elected legislative council can give advice to the L-G on the matters reserved under state list and concurrent list except public order, police and land.

- The amendment has also entrusted that L-G should function on the aid and advice of the legislative council or on the orders of President of India.

- **Article 239AA** also empowers L-G to refer a bill to the President of India in any matters on difference of opinion.

What are the recent changes?

- **National Capital Territory of Delhi (Amendment) Act, 2021** has been introduced by the Parliament of India to change the governance structure, which

has opened the scope for more tussles between the union representative and elected government.

- The amendment act proposes to change the term 'Government' in any law means the L-G of Delhi not the elected legislative council.

- The act also barred the state assembly to create any committee for day to day administrations and dissolved the earlier committees created for the same purpose.

- Amendment has mandated the elected government to take opinion of the L-G before any executive actions.

What are the major concerns?

- **Federal structure:** Federalism is a part of Basic Structure Doctrine as mentioned by the Supreme Court of India in **Keshavananda Bharti Case**, overriding power of the L-G on elected government will destroy the idea the federalism.

- **Hindrance in legislative and executive actions:** Difference in opinion may impact the legislative and executive action and can reduce the efficiency of developmental process.

- **Checks and balances:** Overriding power of the Union representative with arbitrary mention of any powers reduced the scope for check and balances.

- **Democratic values:** Federalism, check and balances and elected government are the major pillars of Indian Democracy. Any disturbances in these ideals will reduce the democratic values that have been enshrined by the founding fathers.

- **Fiscal devolution:** the power tussle between L-G and elected representatives impact the fiscal federalism and fiscal devolution among state and the centre.

What are the Judicial Opinion?

- Delhi High Court has taken the stances in the favor of central government, not to provide statehood to National Capital Territory of Delhi.

- Supreme Court has referred the case named 'National Capital Territory v/s Union Of India' to the constitutional bench. The five judge bench noted that:

➤ Purposive construction: the objective behind the 69th Constitutional Amendment is to interpret the new added articles.

➤ Principle of federalism and democracy should be there in the interpretation.

➤ L-G is bounded by the aid and advice of the state council of ministers on the subjects under state jurisdiction except public order, police and land.

➤ L-G should act as a facilitator in the legislative and executive process.

➤ Any matter cannot be every matter, L-G should have the power to reserve any matter but cannot reserve every matter on the grounds of difference of opinion.

What could be possible development to resolve the power tussle?

⊙ **Constitutional ideals:** Both the elected government and the L-G should perform the duties on the ideals laid down by the constitution.

⊙ **Ensuring Fiscal Federalism:** The fiscal devolution and federalism should be incorporated to provide financial independence to the elected government to perform its actions.

⊙ **Welfare and developments:** Power tussle between the two power centres should not impact the developmental process for the people. Government whether central or legislative assembly should ensure proper development.

⊙ **Judicial intervention:** Judiciary should intervene neutrally and give its interpretation and save the ideals of democracy by maintaining a checks and balance between two power centres.

⊙ CONCLUSION:

Indian democracy is based on the principles of federalism, elected representative and checks and balances. Union representatives always remains a grey area in the legislative and executive process, the state legislative elected by the people should act accordingly with the constitutional values and L-G should act on the aid and advise of the elected government. In order to protect the checks and balances the new amendment act should maintain a balance of power between two positions so to keep a check on arbitrary actions of both the power centres. Power tussle should be the reason of hindrance in the developmental process.

Practice Question
1. What is the dual governance issue in Delhi? Do you think Supreme Court's pronouncement has been successful in resolving this power conundrum?
2. Indian federalism is undergoing structural as well as functional changes. In the light of the statement, analyse the need for re-examining the federalism in India. Also suggest some measures for deepening federalism in India.

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APPROVAL FOR UPGRADATION OF 2G MOBILE SITES TO 4G AT SECURITY SITES IN LWE AREAS

CONTEXT:

⌑ **The Union Cabinet has approved a Universal Service Obligation Fund (USOF) project for upgrading 2G mobile services to 4G at security sites in Left-Wing Extremism (LWE) hit areas.**

⊙ BACKGROUND

- The Naxal insurgency or Left-Wing Extremism(LWE) originated in a 1967 uprising in Naxalbari (West Bengal) under the leadership of **Charu Majumdar**, by the Communist Party of India (Marxist).

- They are the group of people who believe in the far-left radical communist's political theory derived from the teachings of the Chinese political leader Mao Zedong.

- The most prominent among the groups that have mushroomed in recent years are the People's War Group (PWG) and the Marxist Communist Centre (MCC).

- Left- Wing Extremism is concentrated in Eastern India, particularly an area known as **the Red Corridor** spread across the states of Chhattisgarh, Odisha, Jharkhand, Bihar, and Andhra Pradesh.

⊙ ANALYSIS

How will upgradation to from 2G mobile sites to 4G help in tackling LWE?

- **Intelligence inputs:** The upgradation will fulfil the communication needs of the security personnel deployed in LWE affected areas. Thus, resulting in better and real-time intelligence sharing.

- **Connectivity:** It will enable better internet and data services in these areas fulfilling the government's goal of providing mobile connectivity in rural areas.

- **Service Delivery:** In addition, delivery of various e-governance services, banking services, tele-medicine, tele-education etc. through mobile broadband will be possible.

What is Left- Wing Extremism?

- LWE organizations are the groups that try to bring change through violent revolution. They are against democratic institutions and use violence to subvert the democratic processes at the ground level.

- These groups prevent the developmental processes in the least developed regions of the country and try to misguide the people by keeping them ignorant of current happenings.

What are the Left-wing affected states in India?

- As many as nine Indian states are bearing the brunt of Left- Wing Extremism.

- Of these, Andhra Pradesh, Bihar, Jharkhand, and Chhattisgarh are the worst-affected while Madhya Pradesh, Maharashtra, Orissa, Uttar Pradesh, and West Bengal are partially affected.

- Andhra Pradesh and Bihar remain the hotbed of Peoples' War Group and MarxistCommunist Centre operations.

Trend in Left Wing Extremism

- The geographical influence of Maoists has contracted to only 41 districts in the country, which is a sharp reduction from 96 such districts in 10 States in 2010.

- LWE incidents have also reduced from 2,258 in 2009 to 349 incidents till August 2021.

What are the major causes behind the sustenance of Left Wing Extremism in India?

- **Tribal discontent**: The Forest (Conservation) Act, 1980 deprives tribals of the authority to use forest produce.

- **Displacement**: There has been a huge displacement of the tribal population in the LWE-affected states due to development projects, mining operations, and other reasons.

- **Poverty:** A huge chunk of the tribal population lives below the poverty line. They are also devoid of basic education and health facilities. Thus, Maoists are easily able to persuade them by offering to take up monetary incentives and a better future.

- **Absence Of Strong Technical Intelligence**: There is poor technical intelligence when it comes to tackling LWE For instance, some villages are not yet connected properly with any communication network which hinders action against LWE.

- **Poor Governance:** It is seen that even after the police take hold of a region, the administration fails to provide essential services to the people of that region.

- **Police Atrocities**: Tribals are sometimes harassed by the security forces in the mistaken belief that they may be Maoists. Such instances create hatred against security forces and boost recruitment in Maoist camps.

- **Ideological Boost**: Mao was able to oust the Chinese government and establish communism in China. To date, Communists are ruling the country, which gives a strong ideological boost to Maoist movements across the world.

- **Support from other actors**: They are connected to various internal and external insurgent groups that provide weapons, shelter, and finance. For instance, as per a few reports, CPI Maoists may have links with foreign Maoist organizations in the Philippines, Turkey, etc.

What are the impacts of rising Left-Wing Extremism in India?

- **Hampering Democracy**: They threaten the locals before the conduct of elections and prevent them from voting. It violates the principle of participative democracy.

- **Infrastructural Damage**: They destroy the roads, transport system, and government resources. Thereby they create hindrance in governance and last-mile connectivity.

- **Illegal Activities:** They resort to extortion, abduction of important personalities like Politicians, bureaucrats, police, etc. They are also engaged in drug trafficking cartels.

- **Undermines Credibility of Government**: The survival of LWE shows a failure of governance thereby eroding the faith of masses in governance set up and impacting the unity of the nation.

- **Isolating Tribal Villages:** These extremist movements have disconnected several tribal villages from the national mainstream.

- **Security threats:** Extremism causes threats to the security of the nation and assets of the country. It threatens the unity and diversity of the nation. Radicalization of youth poses a threat to internal security. It has impacted the development of the affected region leading to many people still living in poverty.

Steps taken to contain Left Wing Extremism in India

- **Establishing LWE Division:** A dedicated left-wing extremism division was established in 2006 under the Ministry of Home Affairs. It aimed to effectively address the LWE insurgency

- **Using UAPA:** CPI (Maoist) Party is designated as a terrorist organization under the Unlawful Activities (Prevention) Act, 1967. This gives the forces greater power and autonomy to deal with Maoists.

- **National Policy and Action Plan:** to address the LWE problem has been put in place that envisages a multi-pronged strategy involving

- **Security-related measures:** Providing Central Armed Police Forces battalions, training, funds for modernization of State police forces, equipment & arms, sharing of intelligence, etc.

- **Security Related Expenditure (SRE) Scheme:** Under the scheme, the Central Government reimburses any expenditure related to LWE affected areas to the State Governments.

- **Developmental interventions:** construction of roads, strengthening of communications network, installation of mobile towers, improving the network of banks, post offices, health and education facilities, etc.

- **Operation 'SAMADHAN':** is the Ministry of Home Affairs (MHA)'s initiative to deal with the Naxal problem. The acronym SAMADHAN stands for Smart leadership, Aggressive strategy, Motivation and training, Actionable Intelligence, Dashboard Based KPIs (key performance indicators) and KRAs (key result areas), harnessing technology, action plan for each theater, and No access to financing.

- **Greyhounds:** It was raised in 1989 as an elite anti-naxal force in Andhra Pradesh and Telangana.

- **Aspirational District Program:** Monitoring of Aspirational districts in 35 LWE affected districts.

- **Media Plan:** Activities like Tribal Youth Exchange programs are organized and radio jingles, documentaries, pamphlet distribution, etc. are being conducted.

- **Schemes & Policies:** Various schemes like Roshni have been used to improve skill development.

- Universal Service Obligation Fund supported the Scheme of Mobile Services to increase mobile connectivity.

- Effective implementation of provisions of PESA, 1996 on priority.

- Surrender and Rehabilitation policy for Naxalites in affected areas.

- Facilities of residential schools to children – (e.g. ChooloAasman, Pota Cabins, NanheParinde) as well as focus on sports infrastructure.

◉ National Rural Employment Guarantee Programme (NREGA) is being implemented in 330 districts affected by Naxalism for demand-driven wage employment.

Issues in Government Measures:

◉ **Intelligence inputs:**The traditional method of gathering intelligence through police receivers placed on hills is not delivering optimum results. The recent April attack exposed this lacuna as Maoists deliberately gave false information over it.

◉ **Large troop operations:** It is believed that larger forces give better protection but the recent attack exposed their vulnerability. The 1000 personnel movement wasn't able to manoeuvre secretly and hence exposed themselves to the Maoists.

◉ **Trust Deficit:** The common masses don't trust the forces/administrative authorities due to varied cultures and external appearance. This automatically reduces the impact of tribal-friendly measures.

◉ **Lacunas in Protecting State Informers:** The people who give information to security forces are often tortured and killed by Maoists. The state has not done enough to protect them.

◉ **Approach in Tackling:** More emphasis is placed on looking at LWE as a security problem. However, in reality, it is more of a socio-economic and political issue.

◉ **Lack of Conviction**: Some local politicians covertly support the conduct of Naxals that impairs the intensity of anti LWE operations.

◉ **Lack of coordination:** among the states andbetween State police and Central forces results in security voids which are exploited by the Naxals.

◉ **Lack of coordination** Inadequate use of Technology: The use of drones, ground sensors, smart guns, AI, etc. has been inadequate in Naxal areas.

Suggestions to tackle Left Wing Extremism

◉ **Peace Agreements:**Government of India and the Maoists should try to sign Peace agreements that would be a win-win situation for all. In this regard, learnings from Mizo Accord can be taken that have delivered desired results.

◉ **Development Initiatives:**Ensure all-around development of the Naxal-affected. It would involve strengthening the rights of local communities, improving governance, and augmenting public perception management.

◉ **Bridging Trust Deficit:**employ more local people in the administrative process which can act as a bridge to curtail the trust deficit. Further support of civil society can be taken for awarding tribals.

◉ **Eg:** A peace march was organized in March 2021 where about 150 tribals from Chhattisgarh, Odisha, and Telangana participated under the slogan of 'Bastarmaangehinsa se Azadi'.

◉ **Force Rationalisation:** Forces should be used in small groups for maintaining greater efficiency. For instance, one of the most successful operations (the Greyhounds) involved the use of small teams that operate on solid human intelligence.

◉ **Policy Measures:** Policy measures that provide indirect benefits should be implemented with due care. For instance, effective implementation of the Forest Rights Act can ensure better control of local communities over Minor Forest Produce. This can reduce their attraction towards LWE.

◉ CONCLUSION

Though the country has made significant success in containing Naxalism, continued efforts and focus are needed in eliminating the menace. The strategy of the central and the state governments that use 'hard' and 'soft' approaches simultaneously will go a long way in solving this problem.

Practice Question

1. Technology intervention can not only help in tackling security challenges related to Left Wing Extremism (LWE) but can also help in socio-economic development of the affected regions. Examine.

2. Discuss the threat of Left Wing Extremism (LWE) to India. Briefly explain the Government of India's approach to counter the challenges posed by LWE.

****

ASSESSING THE STATE OF (UN)EMPLOYMENT IN INDIA

CONTEXT:

- Latest data from the Centre for Monitoring Indian Economy (CMIE) shows that India's labour force participation rate (LFPR) has fallen to just 40% from an already low 47% in 2016.

⊙ BACKGROUND

- **Pre-Covid-19 Era:** Even before COVID-19, the unemployment rate touched a peak in 2017-18 at 6.1%.

- **Post- Covid-19 Era:** Meanwhile, the rural unemployment rate rose to 8.35% in February 2022 after mild fluctuations around 5-7% since June 2021.

⊙ ANALYSIS

What is Labour Force Participation Rate (LFPR)?

- According to the CMIE, the labour force consists of persons aged 15 years or older, who are either employed or unemployed and actively looking for a job.

- LFPR represents the "demand" for jobs in an economy.

Understanding Unemployment

- Unemployment occurs when a person who is actively searching for employment is unable to find work.

- The most frequent measure of unemployment is the unemployment rate (UER), which is the number of unemployed people divided by the number of people in the labour force.

LFPR Trend

- In India, the LFPR is not only lower than in the rest of the world but also falling.

- Global average of LFPR is around 60%. In India, it has been sliding over the last 10 years and has shrunk from 47% in 2016 to just 40% as of December 2021.

- As per the Centre for Monitoring Indian Economy, the average urban unemployment rate remained higher at 9.04% in 2021 and above 7% in January-February 2022.

- Recent trend suggests that not only that more than half of India's population in the working-age group is deciding to sit out of the job market, but also that this proportion of people is increasing.

Status of women unemployment

- In urban areas unemployment among educated women was twice their male counterparts.The rate went up to 19.8% in 2017-18 from 10.3% in 2011-12.

- For rural educated women, unemployment stood at 17.3% in 2017-18 increasing sharply from 9.7 per cent in 2011-12.

- 'Gender Inclusion in Hiring in India' Report: 8.7% of working-age urban, educated women in the country are unemployed but only 4% of comparable men find themselves without a job.

Reasons to Low Female Labour Force Participation (FLFP):

- There is growing feminisation of agriculture due to socio-cultural restrictions, lack of alternate skills, and movement of men to cities away from agriculture.

- High Unpaid care and domestic work hours of Women in India (women do almost 10 times as much unpaid work as men).

- There are also social barriers such as restriction on women's mobility outside the house, flexibility in timings, proximity to their households, early age at marriage and child-birth
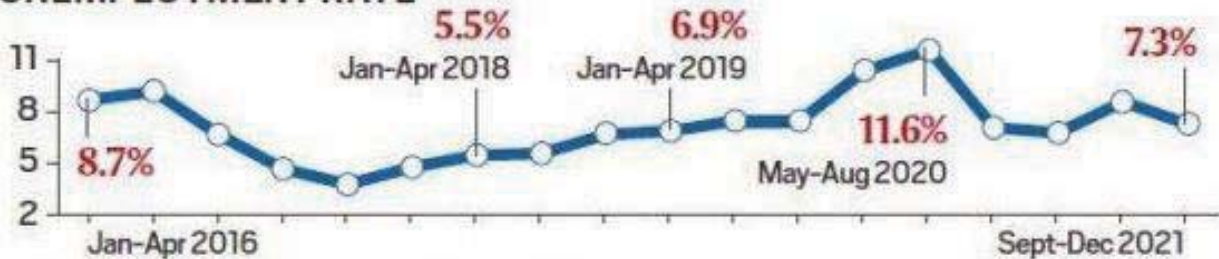

CHART 1

LABOUR FORCE PARTICIPATION & EMPLOYMENT RATES

47% — 42.8% ■ LFPR (in %) ■ ER (in %) 40.4% — 37.4%

CHART 2

UNEMPLOYMENT RATE

5.5% Jan-Apr 2018   6.9% Jan-Apr 2019   7.3%

8.7%   11.6% May-Aug 2020

Jan-Apr 2016   Sept-Dec 2021

Source: Centre for Monitoring Indian Economy

What factors are responsible for high unemployment rate?

- **Boost in labour supply:** Size of labour supply in India is getting a boost from the rapid expansion of the working age population.

- **Rising job aspirations:** The nature of labour supply is changing too, with increasing enrolment of young adults for education and their rising job aspirations.

- **Reduced workforce in agriculture:** Workforce engaged in agriculture has been declining in India from 258 million in 2005 to 197 million in 2018. The decline has been partly due to stagnant public investment from 1990s and also driven by the pull of new opportunities in towns and cities.

- **Manufacturing sector:** Size of manufacturing workforce in India declined by one million from 2012-

2018. Micro and small firms received severe setbacks due to increase competition and rising cost.

- **Poor skilling of youth:** According to Periodic Labour force survey 2018 the pervasive joblessness was due to poor training of youth as only 7% of the people surveyed declared any formal or informal training.

- **Pandemic:** Increase in the country's unemployment rate can be mainly attributed to COVID at present. Many people lost their jobs and lockdowns led migrants to flee from urban centers to rural areas.

- **Prevalence of unorganised sector:** Absence of a good gauge of jobs in India because India is predominantly an unorganized-sector led economy that does not generate stable jobs.

◉ **Inadequate growth of infrastructure:** Inadequate growth of infrastructure and low investments in the manufacturing sector which led to decrease in employment in the secondary sector.

◉ **Lack of women empowerment:** Regressive social norms that deter women from taking or continuing employment.

What are the impacts of unemployment in India?

◉ **Poverty:** Unemployment can give rise to the problem of poverty and deter the living conditions of the people.

◉ **Extra burden on government:** The government suffers an extra borrowing burden and rise in fiscal development because unemployment causes a decrease in the production and less consumption of goods and services by the people.

◉ **Less focus on capital:** Government spending is mainly diverted towards revenue expenditure leading to decrease in spending for capital expenditure.

◉ **Rise in antisocial elements:** Unemployed persons can easily be enticed by antisocial elements. This makes them lose faith in the democratic values of the country.

◉ **Increase in crime:** People unemployed for a long time may indulge in illegal and wrong activities for earning money which increases crime in the country.

◉ **Rise in socio-economic cost:** Unemployment affects the economy of the country as the workforce that could have been gainfully employed to generate resources actually gets dependent on the remaining working population, thus escalating socio-economic costs for the state.

How to create employment?

◉ **Increase in infrastructure spending:** Infrastructure spending by the Centre needs to go up. The spend needs to go up to create more jobs and push the money in the hands of the people so that consumption picks up.

◉ **Non-farm employment opportunities:** Rural jobs have started falling again. Non-farm employment opportunities in the villages should be focused either by encouraging private investment or pushing public spending.

◉ **Increase investment:** A large part of the solution to this lack of adequate jobs is in increasing investments.

◉ **Focus on demand size:** The investment climate needs to be business-friendly and government interventions must shift away from supply-side support to spurring demand.

◉ **Impetus to manufacturing sector:** Urgent need to create more jobs in manufacturing sector by changing labour laws, giving special assistance to labour-intensive sector and e**mployment-linked production incentives**

◉ **Bridging the digital divide:** Additionally, special efforts need to be made to ensure minimal disruption in continued education and to bridge the digital divide.

◉ **Strengthening rural jobs scheme:** MGNREGA and rural jobs schemes have to be strengthened and their capacity increased, but only a portion of the workforce might be accommodated in it.

◉ CONCLUSION

Given the situation, urgent action is needed in multiple fronts including investment in human capital, increase expenditure on MGNREGA, revival of productive sectors and programmes to stimulate small entrepreneurship.

Practice Question

1. According to the Centre for Monitoring Indian Economy (CMIE), India's labour force participation rate (LFPR) has fallen to just 40% from an already low 47% in 2016. What are the reasons for a low LFPR in India? Mention the measures taken by the Government of India to boost employment.

2. In the absence of proper skilling and employment opportunities, India's demographic dividend may soon turn into demographic disaster. Examine.

****

AGRICULTURE DISTRESS IN INDIA

CONTEXT:

- **National Bank for Agriculture and Rural Development (NABARD) is planning to formulate a farmer distress index (FDI) to track, identify and support the real needy and distressed farmers.**

- **As the small and marginal farmers getting a raw deal in farm loan waivers and the government schemes unable to support them under such distress situations.**

⊙ BACKGROUND

- Loan waivers for loans taken by farmers are unique to India.

- Economists have generally regarded this to be a populist and fiscally risky measure that can cause long term problems.

- The Loan Waivers can constitute a significant fraction of the GDP.

- The first nation-wide farm loan waiver was implemented in **1990 by Janata Partygovernment led by then Prime Minister V.P. Singh** and cost the government Rs 10,000 crores.

- A number of agitations by farmers have been held demanding loan waivers, and the political parties have capitulated or competed by announcing Loan waivers for farmers.

- On 29 February 2008, **P. Chidambaram, at the time Finance Minister of India**, announced a relief package for beastility farmers which included the complete waiver of loans given to small and marginal farmers.

- In 2014, Telangana waived Rs. 17,000 crore in loans to 3.6 million beneficiaries.

- In 2017, at least four states Uttar Pradesh, Maharashtra, Punjab and Karnataka, announced farmer loan waivers, with estimated cost of about US$13.6 billion. Experts project that if the loan waivers are implemented nationally will cost about 2–2.6% of GDP.

- The RBI opposes the loan waivers. The waivers hurt India's public sector banks which are already under stress. Many farmers in other states have stopped paying loans and are withdrawing deposits from banks in anticipation of waivers.

What is Farmer distress Index?

- The index will measure the level of distress, by which the government and the financial institutions can decide on an appropriate package of support instead of the current practice of doling out distress package to all the farmers across the board.

- This index won't be uniform across the country as it changes from place to pace depending on the stress levels.

- It will also help the entire financial sector, government departments and insurance companies.

- While the distress of a farmer is usually measured by the extent of his crop damage, this leaves way too many distressed farmers in other areas out of the beneficiary ambit.

- **Advantages:** This farmer distress index can integrate the available high-frequency data on key agricultural variables like

  ➤ deviation of monsoon rains,

  ➤ excessive rainfall, drought and dry spells;

  ➤ variations in temperature and soil moisture,

  ➤ yield of major crops in the district, proportion of area under irrigation,

  ➤ Depth of underground water,

  ➤ Unusual frost and

  ➤ Marketing opportunities available to the farmer that may include the proportion of wheat, paddy, chana, tur, groundnut, soybean etc. produced and procured at MSP.

Need of identifying distressed beneficiaries in India

- Agriculture in India has been facing several issues such as fragmented **land holding, depleting water table, deteriorating soil quality, increasing input costs, low productivity etc.**

- Output prices may not be remunerative as farmers are often **forced to borrow** to manage expenses.

- According to a study jointly conducted by **Nabard and Bharat KrishakSamaj (BKS),** a farmers producers' organization, in Punjab, more than **60 per cent** of the 'very high' and 'high' distress small and marginal farmers (SMFs) did not receive farm loan waiver (FLW) benefits.

- In Maharashtra also, close **to 42 per cent** of the SMF whose distress category was 'very high' did not receive FLW benefits.

- Thus indebtedness is the key reason for several **farmer suicides** in India.

- **Loan waivers** can provide some relief to farmers in such situations.

> **What is a farm loan waiver?**
>
> - Farm loans are either crop loans or investment loans taken from banks to buy inputs or agricultural equipment.
>
> - When there is a poor monsoon or natural calamity, farmers could not be able to repay their loans.
>
> - So the centre or the state government take over the liability of farmers and repay the banks.
>
> - Waivers are mostly selective, that is, only particular loan types, particular categories of farmers, or loan sources may qualify.
>
> - For example, in **2008, crop and investment** loans were completely waived for marginal and small farmers (those with less than 2 hectares of land ownership) and other farmers were only given a 25% reduction.

Government initiatives

- In recent years, the Central government has taken various measures like the PM FasalBimaYojana (PMFBY), PM KrishiSinchaiYojana (PMKSY), electronic National Agricultural market (e-NAM), Soil health card, Neem-coated urea etc.

- **PM FASAL BimaYojana (PMFBY):** The scheme was conceived as a milestone initiative to provide a comprehensive risk solution at the lowest uniform premium across the country for farmers.

- It provides an insurance cover against failure of the crop thus helping in stabilising the income of the farmers.

- **Scope**: All food & oilseed crops and annual commercial/horticultural crops for which past yield data is available.

- **Premium:** The prescribed premium is 2% to be paid by farmers for all Kharif crops and 1.5% for all rabi crops. In the case of annual commercial and horticultural crops, the premium is 5%.

- Premium cost over and above the farmer share was equally subsidized by States and GoI.

- However, GoI shared 90% of the premium subsidy for North Eastern States to promote the uptake in the region.

- The scheme was compulsory for loanee farmers availing Crop Loan/Kisan Credit Card (KCC) account for notified crops and voluntary for others.

- **PM Krishi Sinchai Yojana (PMKSY)**: PMKSY is a Centrally Sponsored Scheme (Core Scheme) launched in 2015. Centre- States will be 75:25 per cent. In the case of the north-eastern region and hilly states, it will be 90:10.

- **Its objectives are:**

  ➤ Convergence of investments in irrigation at the field level,

  ➤ To expand the cultivable area under assured irrigation (HarKhetko pani),

  ➤ To improve on-farm water use efficiency to reduce wastage of water,

  ➤ To enhance the adoption of precision-irrigation and other water saving technologies (More crop per drop),

  ➤ To enhance recharge of aquifers and introduce sustainable water conservation practices by exploring the feasibility of reusing treated municipal based water for peri-urban agriculture and attract greater private investment in a precision irrigation system.

- Agriculture is a major component of Priority Sector Lending (PSL), and the target for bank lending to agriculture has been revised upwards every year.

- In addition to food subsidy under PDS, the government also provides fertilizer subsidy year after year.

Is the situation satisfying in India?

- Farm loan waivers are just a temporary solution. They might help the government buy peace with farmers in the short run, however, they are unlikely to change much on the ground. It is a relief only for one season with the farmers going back to distress in the next season.

- Studies reveal that loan waivers do not lead to a high investment or better labour market outcomes.

- No improvement in farm productivity for households qualifying for loan waivers reveals the failure of the programmes to achieve its desired goals.

- Loan waivers can also negatively impact the credit flow because it creates distortions in the credit market since repeated waivers encourage default among the farmers. It also increases the NPAs (Non-Performing Assets) of banks.

- For the government, loan waivers not only increase the fiscal deficit and interest burden but also limit its ability to undertake productive capital expenditure in the agriculture sector affect the long-term growth in the sector.

- Loan waivers encourage farmers to reduce productive investments and spend more on consumption. Thus in the expectation of waiver, those farmers who can afford to pay, will not pay.

- Providing loan waivers in some states encourage farmers from other states to demand loan waiver even if they don't need them.

- Loan waivers = Govt's borrowing increases = Crowding out private borrowers = increase in the cost of borrowing for others.

- Loan waivers cost taxpayers. For instance, about Rs. 525 billion was spent on the loan waiver of 2008.

- Loan waivers are just a tool for politicians to gain vote banks = prevent them from coming up with a long-term solution.

What should be the solution for it?

- **Land fragmentation**: Long-term leasing of farmland without withdrawing the land ownership can be implemented. This is in line with **Niti Aayog's Model Land Leasing Act** i.e., no change in ownership, no tenancy rights, and the land reverts back to the owner on the expiry of the lease.

  - Long-term leasing can also facilitate the entry of the private sector into agriculture. The private sector can bring in **crop diversification, the introduction of high-value crops, mechanization, new farming techniques and technologies,** investment in post-harvest management and processing, and more employment opportunities.

- **Increase Input cost:** The government policies should encourage integrated pest management that combines, biological, chemical, mechanical and physical means to combat pests with a target to eliminate/considerably reduce the need for pesticides.

  - The local fertilizer industry requires support and the timely delivery of subsidies would improve their capital needs, allowing them to manage costs through internal sources instead of external loans.

  - **State seed policies** should encourage contract farming, identification of new genotypes for treating pest and disease syndromes, as well as adverse weather conditions. Precision farming techniques such as Systematic Rice Intensification (SRI) can help increase seed production in this respect.

- **Via institutional credit:**
  - Ensure that institutional financing is available and accessible.

  - Village-wise lists of deeply indebted farmers must be prepared annually to identify farmers on the path to potential suicide.

  - NABARD, along with local administration, should come up with local policy interventions and also devise timely loan restructuring initiatives, insurance claim settlements, and better counselling.

  - Nationalised banks need to change their way of functioning in order to expand rural outreach.

- **Creating other job opportunities**: The focus has to be shifted from farm income to farmers' income i.e., boosting farmers' earnings through expansion of job opportunities in and around rural areas.

  - Promoting the lucrative allied activities of agriculture such as horticulture and floriculture also helps boost farm incomes.

  - **GobardhanYojana** can be implemented all over the country. It aims at keeping the villages clean and also generate energy while improving the income of farmers and cattle herders.

⊙ CONCLUSION

The need of the hour is to make a comprehensive plan for identifying the distressed beneficiaries and integrating the governmental and financial institutional initiatives for the betterment of Agricultural situation in India.

> **Practice Question**
>
> 1. What is the purpose of Farmer Distress Index? Do you think it can help in plugging support package loopholes and rationalise subsidies to farmers? Substantiate your answer.
>
> 2. "The agriculture sector is critical for India from a consistent growth and food security perspective". Discuss the measures needed to revitalise the agricultural sector.

****

INVIGORATING THE AYUSH INDUSTRY

CONTEXT:

- AYUSH system of treatment, if integrated with the mainstream system of medicine, will give wider acceptance to traditional systems of India.

⊚ BACKGROUND:

- India has a tradition of rich and diverse history of traditional medicines.

- In last one century though the rise of Allopathy had side-lined the use of Indian traditional medicine and health systems such as Ayurveda, Unani and Yoga.

- World as a whole and India in particular nevertheless is moving back to the systems of traditional medicines.

- It is therefore necessary that the government takes effective steps to make treatment from Indian Medicinal systems available to all.

What is the market value of traditional medicinal treatment today?

- In 2020, global market for herbal medicine was valued at $657.5 billion.

- It is expected to grow exponentially in the coming times.

- Globally, in terms of value, the Chinese traditional medicine market leads the way.

> Healthy China 2030 plan forecasts that the value of traditional Chinese medicine (TCM) market may reach $737.9 billion within China and globally by 2030.

- In India, the **National Ayush Mission (NAM)** was launched in 2014 by the Department of Ayush, Ministry of Health and Family Welfare, to promote Ayush systems and address the needs of the sector in a comprehensive way.

- The Indian Ayush sector has seen the growth of 17% between 2014 and 2020.

> **About AYUSH**
> - AYUSH is the acronym of the medical systems that are being practiced in India such as **Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy.**
> - These systems are based on definite medical philosophies and represent a way of healthy living with established concepts on prevention of diseases and promotion of health.

> - The basic approach of all these systems on health, disease and treatment are holistic.

What is National Ayush Mission?

- **National AYUSH Mission**

  > India possess an unmatched heritage represented by its ancient systems of medicine like ASU&H which are a treasure house of knowledge for preventive and promotive healthcare.

  > The positive features of the Indian systems of medicine namely their

  - diversity and flexibility

  - accessibility

  - affordability

  - a broad acceptance by a large section of the general public

  - comparatively lesser cost and growing economic value

  - have great potential to make them providers of healthcare that the large sections of people need

  > Keeping this importance in mind, the government of India launched the **National AYUSH Mission (NAM).**

  - The proposed Mission addresses the gaps in health services through supporting the efforts of State/UT Governments for providing AYUSH health services/education in the country, particularly in vulnerable and far-flung areas.

  - Special focus is given for specific needs of such areas and for allocation of higher resources in their Annual Plans.

What are the Objectives of National Ayush Mission?

- To provide cost effective AYUSH Services, with a universal access through upgrading AYUSH Hospitals and Dispensaries, co-location of AYUSH facilities at Primary Health Centres (PHCs), Community Health Centres (CHCs) and District Hospitals (DHs).

◉ To strengthen institutional capacity at the state level through upgrading AYUSH educational institutions, State Govt. ASU&H Pharmacies, Drug Testing Laboratories and ASU & H enforcement mechanism.

◉ Support cultivation of medicinal plants by adopting Good Agricultural Practices (GAPs) so as to provide sustained supply of quality raw materials and support certification mechanism for quality standards, Good Agricultural/Collection/Storage Practices.

◉ Support setting up of clusters through convergence of cultivation, warehousing, value addition and marketing and development of infrastructure for entrepreneurs.

Challenges Faced by AYUSH System of Medicine in India:

◉ The courses offered to Ayurvedic practitioners' is below par at most of the institutes.

◉ There is a crunch human resource who could successfully pass on the knowledge of Indian Traditional Medicines to the next generation.

◉ The adequate utilisation of infrastructure in training institutes and hospitals of Ayush.

◉ Effectiveness of very few of Ayush treatments and medicines have been tested as per modern norms and hence lack of scientific backing obstructs their chance of getting accepted by people at large.

◉ Allopathy system of medicine is today the most accepted and wide spread route of getting treated. Competition from Allopathy dwarfs the growth of Indian traditional system of medicines.

◉ There is a serious information lacuna amongst the general public about the Indian traditional medicine system.

How Traditional System of Medicine could be strengthened?

◉ Government of India's efforts to set up WHO-Global Centre for Traditional Medicine in Jamnagar, whose foundation stone was laid by PM Narendra Modi on April 19, 2022 is a big step forward in the direction of promoting and developing traditional systems of medicine.

◉ More study is necessary, especially in clinical trials, to know more about efficacy India Medicinal System.

◉ WHO has included traditional medicine in the 11th revision of the International Classification of Diseases bythis will help in establishing reliable data on the use of traditional medicine.

◉ The organisational structure of State Medicinal Plant Boards(SMPBs), the body through which herb component of Ayush treatment is taken to the people, needs to be strengthened.

Practice Question

1. Do you agree that Integrating AYUSH System of Medicine into mainstream medical system will give it wider acceptance in the country? Substantiate your answer.

2. India's traditional medicine and way of life hold immense trade and brand potential. Discuss. Also, list various government initiatives to promote the Indian System of Medicines.

****

ARE FREEBIES AFFECTING THE ECONOMIC GROWTH OF INDIA?

CONTEXT:

○ The recent collapse of the Sri Lankan economy has engendered a fresh debate on the 'state's role' It's government provided several free goods and services, the economic collapse and the heavy-indebtedness has left the country no choice but to default on its commitments. As a corollary, the issue of freebies given out by Indian states has come under the lens here.

⦿ BACKGROUND:

- Since independence India has faced several challenges on the various front, like food security, farmers' distress and social discrimination etc.

- The green revolution has ended narrowed down the scope of food insecurity in India, along with several subsidized schemes.

- In recent times the challenges have emerged differently, the freebies and subsidy schemes which were introduced for the betterment of the public and to promote public welfare not it has taken a turn into a populist and political agenda.

⦿ ANALYSIS:

What is the present financial position of the Government?

- **For central Government:**
  - ➤ The debt to GDP ratio has increased from 40% to 90% of the GDP, which accounts for high instalments payments and repayment of loans.
  - ➤ The target of 3% of the GDP as the fiscal deficit suggested by Fiscal legislation has crossed the limit by several times.

- **For the state government:**
  - ➤ The debt to GDP ratio has progressively decreased from 31% of the GDP to around 22% of the GDP by the year 2014.
  - ➤ On the front fiscal deficit, state governments are also lacking behind meeting the target of 3%.

What does the Fiscal Responsibility and Budget Management Act suggest?

- The Fiscal Responsibility and Budget Management (FRBM) Act was passed by the government in the year 2003, to regulate the fiscal discipline of India.

- The act suggested that:

  - ➤ 3% of the GDP as the Fiscal Deficit of the government

  - ➤ The ratio of revenue deficit and fiscal deficit should be zero so that the excess expenditure of the government can create capital which will further give a potential return to the country. Increasing the quality of expenditure of the government.

  - ➤ Monetization of the government's deficit should be the last resort for the central bank.

How freebies are impacting the fiscal discipline of the government?

- Pressure on Revenue Deficit: Freebies and subsidies create pressure on the Revenue budget of the government.

- No capital formation: Revenue expenditure accounts for negligible capital formation in the economy which cannot generate future returns to the government.

- Widening up the Fiscal Deficit: Rise in revenue expenditure and no capital formation cumulatively widen up the fiscal deficit of the government.

- Increase in interest burden: Rise in the deficit will lead to an increase in interest payment for the government and expenditure with no capital formation and no future returns will rise the burden of interest payments.

Other impacts of Freebies and subsidies?

- Rise in Inflation: Freebies demanded for the distribution system increases the scope for inflation in the economy.

- No social incentive to work: Youth of the nation gets no incentive to work and earn due to availability of the freebies.

- Reduces financial credibility of the Country: High deficit of the government and more subsidy schemes will result into lowering the financial credibility of the government.

Are freebies and subsidies needed for developing nations like India?

Despite several impacts on the fiscal management of the government, it becomes very important for the developing nation to incentivize such subsidies and freebies because of various reasons:

- Food security: To ensure proper Food Security and the Right To Food as a fundamental right under Article 21 of the constitution it becomes mandatory for the government to implement schemes for subsidized food.

- Nutritious food: The demography of developing nations is usually prone to nutrient-deficient diseases. Subsidized nutritious food can reduce the deficiencies among the children and women especially.

- Better Demography: Ensuring nutritious food to the citizens can create healthy and productive demography and help in the creation of Human Capital.

- SDG goals: Sustainable Development Goals have objectives to eradicate hunger (SDG-2) and good health and wellbeing (SDG-3) which can be achieved by the subsidized food schemes in developing nations.

- Farmers Welfare: India faces severe cases of farmers' distress, to improve the condition of the rural economy government needs to ensure schemes and freebies.

- Social Welfare and security: The welfare principle of the state encourages the states to introduce such schemes to promote social welfare and reduce inequality in society.

- Reducing social inequality: Providing food for all can reduce the prevailing social inequalities on various grounds.

- Gender Equality: SDG -5 says about Gender Equality in the society, in developing nations gender inequality remained a severe constraint. To reduce gender inequality and provide a secure social status and recognize all the gender and their sexual orientation it becomes a compulsory step for the government to take such steps.

- Induce demand: During the slowdown and low demand phase these subsidies and freebies can induce demand in the market that can bring up the growth at a certain level. Developing nations facing such abnormalities in the growth process introduce such schemes to increase the demand in the economy and make the market at an equilibrium position.

What measures can be taken by the government to rationalize the fiscal burden?

- **The capability approach**: A theory is given by Noble Laureate Amartya Sen that speaks about increasing the capability of the demography, 'One should not get a gift of free fish rather one should be taught how to catch fish. The state should focus on the development of the demography along with ensuring food security.

- **Targeted Subsidy Schemes**: Targeted subsidy schemes should be introduced to provide proper benefits to the needy that can rationalize the fiscal discipline of the government.

- **POSHAN Abhiyaan:** Government should target PoshanAbhiyaan to promote and distribute nutritious food to the people which will give space to develop the demography of the nation.

- **Social Capital Formation:** Along with food security government must focus on the creation of social capital like health care centres and properly managing the hospitals, and educational institutions.

- **Marginalized section:** Ensuring food and nutritious food security for the marginalized sector of the society poses a big hurdle for the government. Women and children of lower social strata are kept away from such nutritious food, government should focus on women and child development for better demography in the future.

- **Should not be populist measure**: The schemes should focus on the welfare of the nation, not on the political agenda.

⦿ CONCLUSION:

Freebies and subsidies are very much important for the growth and development of the nation, especially for the developing nations with so much diversity in the society. Implementing such schemes increases the fiscal burden of the government in that respect government should rationalize the schemes using various technology spaces available like Artificial intelligence and machine learning. Both the aspects of the subsidy schemes and fiscal discipline helps to decide the financial stability of the government, there should be a fine balance between exhausting fiscal limit and providing rationalise subsidy schemes to the people.

> **Practice Question**
>
> 1. Freebies culture is good politics but bad economics. Critically analyse.
>
> 2. Populist measures such as subsidies provide an immediate relief and are not a sustainable solution. Comment.

CSE REPORT FLAGS POOR STATE OF ORGANIC FERTILISER, BIOFERTILISER SECTOR IN INDIA

CONTEXT:

◔ **Drastic reduction in the production of organic fertilisers observed in India in 2020-21 when compared to the data of 2017-18.**

What are organic fertilisers?

Organic fertilizers comprise a variety of plant-derived materials that range from fresh or dried plant material to animal manures and litters to agricultural by-products.

What are the benefits of using organic fertilisers?

Helps improve the Soil Structure:

◎ Because of the organic matter present in organic fertilizer, soil structure is improved and as a result the soil's ability to hold onto water and nutrients increases.

Microbes Thrive

◎ Synthetic fertilizer consists of chemical molecules without carbon.

◎ These molecules can sometimes be disruptive and are not accessible to microbes.

◎ Organic fertilizers are rich in organic matter, which helps microbes thrive.

◎ Organic fertilizer contains carbon as part of its chemical makeup; and it is the carbon, along with nitrogen, phosphorus and potassium that feeds microbes and enables them to make nutrients available for plants in a naturally occurring biological process.

Sustainable and Environmentally Friendly

◎ Synthetic fertilizers runoff into our waterways harming marine life and water quality.

◎ Organic fertilizers do not run off as easily (if at all) and are associated with soil structure.

◎ It has been observed that organic fertilizer also increases species biodiversity by 30% compared with synthetic fertilizer.

Reduces the use of Fertilizers and Pesticides

◎ Although organic fertilizer can be more costly than synthetic, it can reduce the need for pesticides and the overall nitrogen, phosphorus and potassium requirements.

◎ Because of the reductions, organic fertilizer can be cost neutral and sometimes a cost savings.

◎ Plant Damage Threat Avoided

◎ Some synthetic fertilizers can cause plant damage to leaves and roots. This is less likely with organic fertilizers.

What are the Disadvantages of Using Organic Fertilizers?

● **Not All Products Are Created Equally**

➤ Not all products are created equally and many organic products produce inconsistent results.

Nutrient Levels Are Low

◎ The level of nutrients present in organic fertilizer is often low.

◎ In addition, the nutrients are usually complexed in organic chemical structure; this means using organic fertilizer may not produce the pop of colour seen with a chemical fertilizer.

DIY Compost is a Complicated Procedure

◎ Creating an organic compost is a messy and complicated process that often leads to an inconsistent product and end-result.

Production of Organic Fertilisers in India:

◎ Making compost out of agriculture, animal and plant waste has been practised in India for a long period of time.

◎ Today though we are seeing a new era of organic fertilizers which are made using modern technologies and machineries.

◎ India, at this point of time, is the biggest producer of organic fertilizer in the world. Though the production of the same in the last few years has gone down drastically.

◎ Karnataka alone produces 94% of organic fertilisers in India.

What the reasons for reduction of organic fertilisers in India?

◉ Farmers in India have become habitual of using inorganic fertilisers and making them shift towards the use of organic fertilisers is the biggest hurdle.

◉ Inorganic fertilisers have a history of giving bumper harvest since the time of Green Revolution and hence farmers in India continue to use them ignoring their ill-effects.

◉ Resources allotted by the Indian and state governments for manufacturing, distribution and promotion of organic fertilizers are miniscule when compared to the overall allocation made to the Agricultural sector.

◉ Data of companies through whom state governments procure organic fertilisers is opaque and hence tracing them and enquiring about the quality of their product is difficult.

◉ Stakeholders indicate widespread corruption and faulty tender process in such procurements.

◉ Farmers do not get good results because of such poor quality products and lose confidence in organic and bio-inputs available in the market.

◉ Not many companies today are operating in this sector and hence low competition is leading to sub-standard products being available in the market.

◉ Quality control infrastructure is poor. Many states do not have their own testing laboratories.

Way Forward:

◉ Promoting the use of organic fertilisers amongst farmers is of utmost importance.

◉ Farmers must be made to realise about the agricultural and environmental impact that indiscriminate use of chemical fertilisers have.

◉ Union and states governments need to allocate more financial resources to the manufacturing and promotion of organic fertilisers.

◉ Procurement and distribution of organic fertilisers should be left to be done by local self-government bodies which could ensure transparency in the process.

Practice Question

1. Organic food export can transform Indian economy. Discuss the challenges faced by organic farming in India. What policy measures are needed to overcome them?

2. Sri Lanka's experiment with Organic Farming has raised questions on its efficacy. In light of this statement, discuss the future of organic farming in India.

****

AIP: THE NAVAL TECHNOLOGY THAT INDIA CRAVES FOR

CONTEXT:

○ One of five shortlisted Original Equipment Manufacturers (OEM) called Naval Group, earlier known as DCNS, for the Navy's P-75 India (P-75I) project to build six conventional submarines within the country, announced it would not bid for the project.

What is the P-75I project?

○ In June 1999, the Cabinet Committee on Security approved a 30-year plan for the Navy to indigenously build and induct 24 submarines by 2030.

○ In the first phase, two lines of production were to be established — the first, P-75; the second, P-75I. Both lines producing six submarines each.

○ The contract for P-75 was signed in 2005 with the Naval Group, then known as DCNS, in partnership with Mazagon Dock Shipbuilders Ltd (MDL).

○ The first Kalvari Class (Scorpene Class) submarine under the project was commissioned in December 2017.

○ Another five submarines have been built since; the final one, Vagsheer, was launched last month, and will be commissioned by late 2023.

○ While P-75 deliveries were delayed, P-75I has seen long delays even before it has kicked off.

○ The first Request for Information was issued in 2008, then again in 2010, but the RFP was issued only in July 2021.

○ This will be India's first project under the Strategic Partnership Model — the government will give the contract to an Indian Strategic Partner (SP), which will partner with a foreign OEM to build AIP-powered submarines in the country.

○ MDL and Larsen and Toubro are the two selected SP; the five selected OEMs are:

  ➤ Naval Group (France),

  ➤ ThyssenKrupp Marine Systems (Germany),

  ➤ ROE (Russia),

  ➤ Daewoo Shipbuilding and Marine Engineering (South Korea), and

  ➤ Navantia (Spain).

What is the status of the project?

○ The final bids — one each by the SP in partnership with an OEM — are yet to take place.

○ The project faces hurdles as the Naval Group has already announced it is pulling out, and sources said the Russian and Spanish companies might also not proceed with their bids.

○ Among the concerns, as Naval Group said, is the requirement to demonstrate a sea-proven fuel cell AIP.

○ While some manufacturers may have the technology, it may not have been proven at sea yet.

○ Some analysts believe that while the RFP was clear about these conditions, it is possible that the OEMs were expecting certain concessions in the requirements eventually.

○ Another problem for the OEMs is with respect to the transfer of technology, which is built into the process under the SP model.

○ It is believed that the OEMs are unwilling to share all their expertise, especially the niche technologies that they have built.

Why does the Navy want AIP subs?

○ Issuing the RFP last year, the government said it envisages indigenous construction of six modern conventional submarines with contemporary equipment, weapons & sensors including Fuel-Cell based AIP (Air Independent Propulsion Plant), advanced torpedoes, modern missiles and state of the art countermeasure systems.

○ AIP is important for Indian Navy it has a force multiplier effect on lethality of a diesel electric submarine as it enhances the submerged endurance of the boat several folds.

○ Fuel cell-based AIP has merits in performance compared to other technologies.

○ AIP technology therefore allows a conventional submarine to remain submerged for much longer than ordinary diesel-electric submarines.

○ All conventional submarines have to surface to run their generators that recharge the batteries that allow the boat to function under water.

- However, the more frequently a submarine surfaces, the higher the chances of it being detected. AIP allows a submarine to remain submerged for more than a fortnight, compared to two to three days for diesel-electric boats.

- While the six P-75 submarines are diesel-electric, they can be fitted with AIP technology later in their lives.

- India has been working to develop AIP technology indigenously as well.

What submarines does India have now?

- India has 16 conventional diesel-electric submarines, which are classified as SSKs.

- After the last two Kalvari Class subs are commissioned under P-75, this number will go up to 18.

- India also has two nuclear ballistic submarines, classified SSBN.

- Of the 16 SSKs, four are of Shishumar Class, which were bought and then built in India in collaboration with the Germans starting 1980s:

  - 8 are Kilo Class or Sindhughosh Class submarines bought from Russia and

  - 4 are Kalvari Class built in India at MDL.

What type of AIP mechanism is India wanting to have in its submarine?

- **There are different types** of AIP mechanisms available.

- India is looking for under the P-75I project is AIP based on fuel cells.

- These cells convert chemical energy into electrical energy, recharging the batteries of the submarine.

Practice Question

1. Explain how Air Independent Propulsion works? Discuss the significance of the technology for Indian Naval power?

2. India with a coastline of almost 7500 km is vulnerable to various threats. Analyse the issues of maritime security and measure needed to address them.

****

SECTION: B
(PRELIMS)

CURRENT AFFAIRS

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ASI DEMANDS REMOVAL OF ENCROACHMENTS NEAR KARLA CAVES

⊙ **CONTEXT:**   The ASI recently demanded that the district administration remove the encroachments near Ekvira Devi temple which is close to Karla caves.

About Karla Caves:

- **Location:** Situated around 8 km from Bhaja, near Lonavala.
- The rock-cut Buddhist Karla Caves believed to date back to the 1st century BC.
- The rock cut architecture, such as the **Petra in Jordan**, are structures that are created by cutting into sheer rock faces.

> - It is believed that in the 2nd century BC – mid 2nd century AD there were carved thousands of **caves in Sahyadri Hills** (Western Ghats) for all Buddhist communities.
>   ➤ Part of Karla Caves have been created later – in the 5th – 10th centuries AD.

- They are remarkable because they have the **biggest and best-preserved prayer hall** in India.
- The Karla Caves were once a Buddhist monastery and consist of 16 excavations/caves.
- Most of the caves belong to the **early Hinayana phase of Buddhism**, except for three from the **later Mahayana phase.**
- **Chaityagriha: Main Cave:** The main cave is the huge prayer/assembly hall, known as a *chaityagriha*, that's believed to date back to the 1st century BC.
- It has a magnificent roof made out of carved teak wood, rows of pillars decorated with sculptures of men, women, elephants, and horses, and a large sun window at the entrance that deflects rays of light towards the stupa at the rear.
- **Viharas:** The other 15 excavations are much smaller monastery living and prayer spaces, known as *viharas.*

> **Dynasty**
> - These amazing caves were started by ancient Buddhists more than 2,000 years ago: carbon-14 dating, inscriptions, and architecture style indicate that the oldest cave here has been created sometime around 120 BC, during the **Satavahana dynasty.**

- Temples carved in the natural cliff were especially well suited for Indian conditions and prescriptions of Buddhists – they were cool in summer, pleasant in winter, and spiritually were part of nature.

Architecture

- Karla Caves represent the highest achievement of **Indian rock-cut architecture** of the time and are one of the earliest examples of **ornate and richly decorated rock-cut temples in India.**
- The earlier caves were made by the more ancient branch of Buddhists – **Theravada Buddhists.**
   ◉ Back then images of Buddha were not used in temple architecture. Later – Mahayana Buddhist temples from the 5th to the 10th century – include statues of Buddha.
   ◉ The architecture of earlier cave temples in many respects repeats the **elements and construction of wooden architecture.**
- Karla Caves are characterized **by large horseshoe-shaped windows lighting the interiors and vaulted interiors.**

Archaeological Survey of India (ASI)

- ASI, under the **Ministry of Culture,** is the premier organization for the **archaeological research and protection of** the cultural heritage of the nation.

- It administers more than 3650 ancient monuments, archaeological sites and remains of national importance.

- Its activities include carrying out surveys of antiquarian remains, exploration and excavation of archaeological sites, conservation and maintenance of protected monuments etc.

- It was founded in 1861 by **Alexander Cunningham-** the first Director-General of ASI. Alexander Cunningham is also known as the **"Father of Indian Archaeology".**

NATIONAL MONUMENT TAG FOR 1,000-YEAR-OLD LAKE IN DELHI'S MEHRAULI

⊙ **CONTEXT:**   Centre orders restoration of historic 1000-year-old Anang Tal Lake in Delhi's Mehrauli.

- **Anang Tal, Mehrauli, an 11th Century mini lake built by the founder King of Delhi Anang Pal Tomar in 1052 AD. The Hindu dynasty of Tomars ruled Delhi and the name itself has come from the Dhillikapuri of which several stone inscriptions were found by General Canningham during British ASI period.**

Anang Tal Lake:

- Anang Tal is situated "**to the north of Jog Maya temple and approximately 500 metres to the northwest of Qutub Complex**", and dates back to 1,060 AD.

- Tradition ascribes this tank to a **Tomar King, Anangpal II,** the builder of Lal Kot.

- It is said to have been a place of a general resort but now it is dried up and used for cultivation.

- It is also said **Alauddin Khalji,** in 1296-1316 AD, utilised the water of this tank when he built (Qutub) minar and extended the Qutub-ul-Islam mosque.

About Anangpal II

- **Anangpal Tomar**: He was popularly known as Anangpal Tomar.

- **Dynasty:** He belonged to the Tomar dynasty that ruled parts of present-day Delhi and Haryana between the 8th and 12th centuries.

- **Founder of Dhillikapuri**: Anangapal II was the founder of Dhillikapuri, which eventually became Delhi.

- **Inscriptions and coins:** Their rule is attested by multiple inscriptions and coins.

- **Lal Kot fort and Anang Tal Baoli:** The region was in ruins when he ascended the throne in the 11th century; it was he who built Lal Kot fort and Anang Tal Baoli.

- **Battle of Tarain:** The Delhi Sultanate was established in 1192 after Prithviraj Chauhan's defeat in the Battle of Tarain (present-day Haryana) by the Ghurid forces.

- **Prithviraj Chauhan:** Anangpal Tomar II was succeeded by his grandson Prithviraj Chauhan.

- Tomars and their Delhi link:

  - Noted medieval historian Professor KA Nizami's Urdu book named Ehd-e-Wusta ki Dilli mentions this.

  - It is translated in English as 'Delhi in Historical Perspectives'.

  - It looks at Delhi across six centuries, tracing the antecedents of Delhi.

  - It refers to Persian annals that describe Delhi as "Inderpat".

  - And yet, according to the book, Delhi formally emerged as a city only in the 11th century when Tomar Rajputs took over the mountainous Aravalli region.

Tomar dynasty

- It is one of the minor early medieval ruling houses of northern India.

- Puranic evidence gives its early location in the Himalayan region.

- According to bardic tradition, the dynasty was one of the 36 Rajput tribes.

- The history of the family spans the period between the reign of Anangapala, who founded the city of Delhi in the 11th century CE, and the incorporation of Delhi within the Chauhan kingdom in 1164.

- Although Delhi subsequently became decisively a part of the Chauhan kingdom, numismatic and comparatively late literary evidence indicates that Tomara kings such as Anangapala and Madanapala continued to rule as feudatories, presumably until the final conquest of Delhi by the Muslims in 1192–93.

Archaeological Survey of India (ASI)

- The Archaeological Survey of India (ASI) functions under the Ministry of Culture.

- It is the premier organization for archaeological researches and protection of the cultural heritage of the nation.

- Maintenance of ancient monuments and archaeological sites and remains of national importance is the prime concern of the ASI.

- Besides, it regulates all archaeological activities in the country as per the provisions of the Ancient Monuments and Archaeological Sites and Remains Act, 1958.

- It also regulates Antiquities and Art Treasure Act, 1972.

National Mission on Monuments and Antiquities (NMMA):

- The National Mission on Monuments and Antiquities was launched in 2007.

- NMMA is mandated to prepare two national registers:

  - national registers on antiquities and

  - national register on built heritage & sites

- Archaeological Survey of India (ASI) is the nodal agency for NMMA to implement the various activities all over the country.

SATYAJIT RAY'S PRATIDWANDI TO BE SCREENED AT CANNES FILM FESTIVAL

⊙ **CONTEXT:** **Satyajit Ray's 1970 movie, 'Pratidwandi' (The Adversary), which tells the story of an educated middle-class man caught in the turmoil of social unrest, was selected to be screened at the Cannes Film Festival.**

Cannes Film Festival:

- Cannes Film Festival was founded in **1946** and the **invitation-only festival** is held usually in May every year.

- Cannes is also **one of the Big Three** major European Film Festivals, alongside the **Berlin International Film Festival in Germany and Venice Film Festival in Italy.**

- ■ **Cannes 2022:**

  - ⊚ India has been chosen as 'Country of Honour' at Marche' Du Film at the Cannes Film Festival 2022.

  - ⊚ As Cannes Film Festival will celebrate its 75th anniversary in 2022 with India being the country of honour, the festival will screen Satyajit Ray's Pratidwandi in Cannes Classic Selection.

    - ➤ The 1970 film has been restored under the **National Film Heritage Mission** which is a project undertaken by the Ministry of Information & Broadcasting.

  - ⊚ Bollywood Star **Deepika Padukone** has been announced as part of the competition **jury of the Cannes Film Festival 2022.**

Satyajit Ray:

- Satyajit Ray, Bengali film director, novelist, and illustrator best known for **Pather Panchali (The Song of the Road) and its two sequels, collectively known as the Apu Trilogy.**

- Ray was known for his humanism, versatility, and careful control over his films and their soundtracks as a director.

- He was regarded as one of the most influential filmmakers of the twentieth century.

- His outstanding film works include "Pather Panchali," "Charulata," "Aparajito," and "The World of Apu," which changed the course of Indian cinema and earned him the Padma Bhushan, **Bharat Ratna**, and an Honorary Oscar for Lifetime Achievement in **1992.**

HATTIS OF HIMACHAL PRADESH

⊙ **CONTEXT:** **Centre would consider favourably the Himachal Pradesh government's request for inclusion of the Hatti community in the list of Scheduled Tribes in the state.**
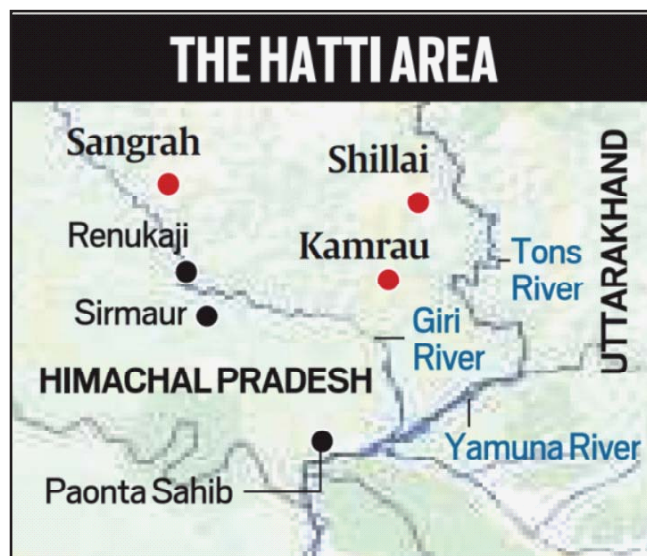
Hattis:

- The Hattis are a close-knit community who got their name from their **tradition of selling homegrown vegetables, crops, meat and wool etc**. at small markets called '**haat' in towns**.

- The Hatti community, whose men generally don a distinctive white headgear during ceremonies, is **cut off from Sirmaur by two rivers called Giri and Tons.**

- Tons divide it from the Jaunsar Bawar area of Uttarakhand.

- The Hattis who live in the **trans-Giri area** and Jaunsar Bawar in Uttarakhand were once part of the royal estate of Sirmaur until Jaunsar Bawar's separation in **1815.**
- Due to topographical disadvantages, the Hattis living in the Kamrau, Sangrah, and Shilliai areas lag behind in education and employment.

Societal norms of Hattis

- The Hattis are governed by a **traditional council called Khumbli**, which like the khaps of Haryana, decide community matters.
- The Khumbli's power has remained unchallenged despite the establishment of the **panchayati raj system**.
- The two clans have similar traditions, and inter-marriages are commonplace.
- There is a fairly rigid caste system among the Hattis — the **Bhat and Khash are the upper castes, while the Badhois are below them.**
- **Inter-caste marriages** have traditionally remained a **strict no-no**.

THE HATTI AREA

Since when have the Hattis been demanding tribal status?

- The community has been making the demand since 1967, when tribal status was accorded to people living in the Jaunsar Bawar area of Uttarakhand, which shares a border with Sirmaur district.
- Their demand for tribal status gained strength because of resolutions passed at various maha Khumblis over the years.

BIRTH, DEATH REPORTING TO BE AUTOMATED

⊙ **CONTEXT:** **Ministry of Home Affairs (MHA) has decided to introduce changes in the Civil Registration System (CRS) in India.**

About MHA's Plan:

- MHA decided to make changes in CRS, since the country has been facing challenges in terms of timelines, efficiency and uniformity leading to delayed and under-coverage of births and deaths in the country.
- The plan has been mentioned in MHA's Annual Report 2020-2021, pointing out that it will be taken up to address the challenges faced by the system in providing prompt service delivery to the public.

- The Government of India has decided to introduce transformational changes in the Civil Registration System of the country through an IT-enabled backbone leading to registration of birth and death in real-time basis with minimum human interface.

- As per the report, the changes would be in terms of "automating the process delivery points so that the service delivery is time bound, uniform and free from discretion".

- The changes would be sustainable, scalable and independent of the location. The project would be modular in nature consisting of conceptualizing the transformation roadmap, Development of IT application along with its implementation, Capacity Building and Maintenance.

Civil Registration System (CRS)

- History: The history of Civil Registration System (CRS) in India dates back to the middle of the 19th century.
  - In 1886 a Central Births, Deaths and Marriages Registration Act was promulgated to provide for voluntary registration throughout British India.

- Post-independence, the Registration of Births and Death Act (RBD Act) was enacted in 1969 to promote uniformity and comparability in the registration of Births and Deaths across the country and compilation of vital statistics based thereon.
  - With the enactment of the Act, registration of births, deaths and still births has become mandatory in India.

- The Registrar General, India (RGI) at the Central Government level coordinates and unifies the activities of registration throughout the country.
  - However, implementation of the statute is vested with the State Governments.

- Directorate of Census Operations are the sub-ordinate offices of Office of the Registrar General, India and these offices are responsible of monitoring of working of the Act in their concerned State/UT.

INDIA'S FIRST BRIDGITAL AUTISM SUPPORT NETWORK SET UP

⊙ **CONTEXT:** **The Tata Power Community Development Trust (TPCDT) has partnered with the Center for Autism and other Disabilities Rehabilitation Research and Education (CADRRE) to launch 'Pay Autention - A different mind is a gifted mind', India's first bridgital autism support network.**

About the initiative:

- To create awareness about autism spectrum disorder (ASD) and help people understand, accept and support individuals with autism and their parents and caregivers

- The initiative shall pave the way for small towns and rural India to access specialised care and support and help create an auxiliary network of champions for the differently abled.
  - This platform shall also enable mentoring, skilling and meaningful livelihoods for people with autism.

- In the first phase, the initiative will primarily focus on supporting children with autism, and subsequently, in the second stage, it will focus on young adults, empowering them with life skills and career readiness.

- It will create a network of grassroot champions, enable early identification, first-level care, teach social skills, ways to ease activities of daily living, hold workshops for sensory and motor development – art and craft, dance, music therapy, physical and mental fitness, communication skills and enable support for academics.

- In addition to this, a toll-free autism support helpline is also launched at 1800 2099 488 to provide interactive support and much-needed professional aid for families in need.

Autism spectrum disorder (ASD)

- Autism spectrum disorder (ASD) is a developmental disability that can cause significant social, communication and behavioral challenges.
- It can involve a wide range of symptoms and skills.
- ASD can be a minor problem or a disability that needs full-time care in a special facility.
- People with autism have trouble with communication.
- They have trouble understanding what other people think and feel.
- This makes it hard for them to express themselves, either with words or through gestures, facial expressions, and touch.
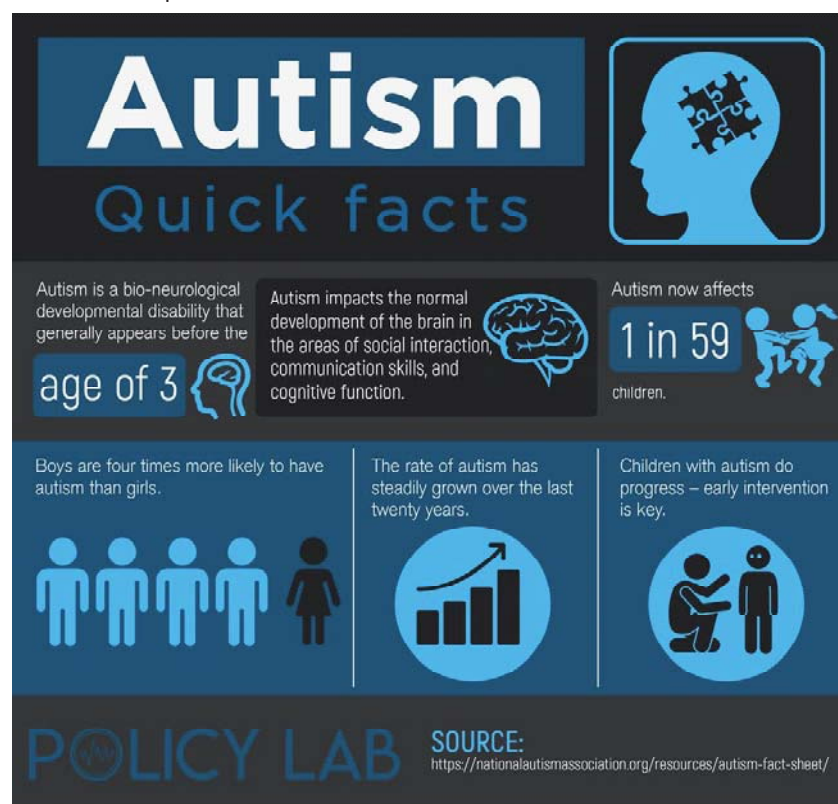
MOTHER NATURE' A 'LIVING BEING' WITH LEGAL ENTITY: MADRAS HC

⊙ **CONTEXT:** **The Madras High Court in a recent order declared "Mother Nature" a Living Being with all corresponding rights, duties and liabilities of a living person.**

The ruling:

- Madras High Court invoked the 'parens patriae jurisdiction', and declared 'Mother Nature' as a 'living being' having the status of a legal entity.
- Justice S. Srimathy observed that the court is hereby declaring 'Mother Nature' a 'living being' having the status of a legal person with all corresponding rights, duties and liabilities of a living person, in order to preserve and conserve it.

- The court observed that 'Mother Nature' was accorded the rights akin to fundamental rights, legal rights, constitutional rights for its survival, safety, sustenance and resurgence in order to maintain its status and also to promote its health and well-being.

> The court is hereby declaring Mother Nature a Living Being having the status of a legal person with all corresponding rights, duties and liabilities of a living person, in order to preserve and conserve it
>
> **JUSTICE S. SRIMATHY**
> Madurai Bench of Madras High Court
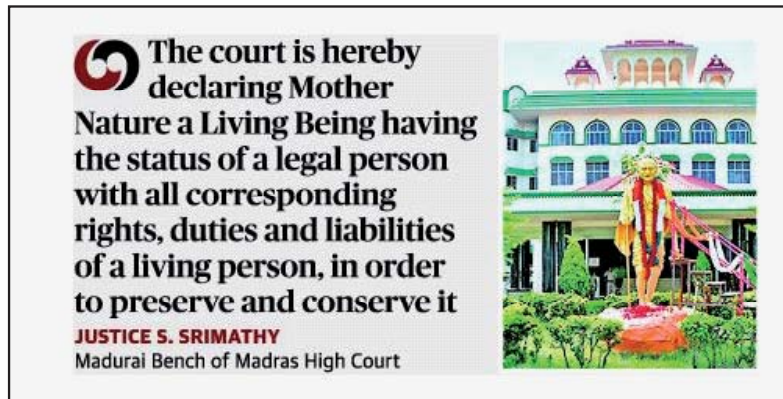
Parens patriae Jurisdiction:

- Parens patriae is Latin for "**parent of the people**."
- Under parens patriae, a state or court has a paternal and protective role over its citizens or others subject to its jurisdiction.
- The doctrine of parens patriae is **a doctrine under which a state has third-party standing to bring a lawsuit on behalf of a citizen when the suit implicates a state's quasi-sovereign interests for the well-being of its citizens.**
- The parens patriae doctrine is also the doctrine in which all orphans, dependent children, and persons deemed incompetent are within the special protection, and under the control of the state.

The 2017 Uttarakhand High Court judgment:

- The Uttarakhand High Court granted legal rights to the heavily-polluted Yamuna and Ganga rivers in 2017.
- The court went on to declare all the glaciers, including Gangotri and Yamunotri, rivers, streams, rivulets, lakes, air, meadows, dales, jungles, forests wetlands, grasslands, springs, and waterfalls as living entities.

Other countries with similar judgments:

- **Ecuador:** The South American country became the first country in the world in 2008 to ratify a constitutional amendment to include nature's rights.
- **New Zealand:** New Zealand and its native Maori have recognised natural ecosystems as living beings. In 2017, New Zealand granted the Whanganui River the legal rights of a human being.
- **Columbia:** Citing the precedent set in New Zealand, the Constitutional Court of Columbia granted legal rights to the Atrato River, near the Panama border.
- **Australia, the United States** and Bangladesh are also some other countries that have acknowledged the legal rights to various natural ecosystems.
- **Bangladesh** in fact went a step ahead and declared all of the rivers in the country to be alive and entitled to legal rights.

CYBER SAKHIS IN MADHYA PRADESH

◉ **CONTEXT:**   **In the backdrop of a sharp rise in cybercrimes across the country in the past few years, Madhya Pradesh has its first cyber sakhis in Harda district who will not only fight against cyber criminals but also educate others as master trainers on how to shield oneself against faceless criminals who may be operating from any part of the country or world.**

Cyber Sakhis:

- As many as 1480 girls and women including Rewa (another name of river Narmada) sakhis and Anganwadi workers living in rural part of Harda would be trained by State Cyber police headquarters.

- Cyber sakhis in Harda district will not only fight against cyber criminals but also educate others as master trainers on how to shield one against faceless criminals who may be operating from any part of the country or world.

    ◉ These master trainers would prevent the increasing effect of cybercrime when the evils of the internet were increasing very fast from village to village and even children were getting affected.

    ◉ Girls were blackmailed by converting their photos from WhatsApp, Instagram, Facebook and other networking sites.

BANGLADESH OFFERS CHITTAGONG PORT USE TO INDIA

◉ **CONTEXT:**   **Bangladesh offered its main seaport - Chittagong Port - to India's north-eastern states like Assam and Tripura to enhance connectivity between the two neighbours.**

Chittagong Port:

- The Chittagong or Chhatogram port is one of the important seaports of Bangladesh, located in the region of Chittagong hill tracts.

- Due to the sea port's close proximity with North-Eastern Indian states, the port facility has the potential to significantly boost economic activity in the North-East Indian states, providing close access to global shipping lanes.

- Earlier in the year 2010, India and Bangladesh signed a Memorandum of Understanding (MoU) to allow for the use of Chittagong and Mongla Ports in Bangladesh for the movement of goods to and from India.

6TH INDIA-GERMANY INTER-GOVERNMENTAL CONSULTATIONS

◉ **CONTEXT:**   **Recently, the Governments of the Federal Republic of Germany and of the Republic of India held the sixth round of Inter-Governmental Consultations.**

Highlights of 6th round of Inter-Governmental Consultations:

The two countries signed agreements for collaboration on:

- Green and Sustainable Development Partnership
- The implementation of Triangular Development Cooperation projects in Third Countries
- Indo-German Development Cooperation Regarding Renewable Energy Partnership
- The Initialing of the Agreement on a Comprehensive Migration and Mobility Partnership
- Continuation of cooperation in the field of advanced training of corporate executives and junior executives from India.
- Agroecology
- Forest Landscape Restoration
- Indo – German Green Hydrogen Task Force

Joint declaration of Intent on Indo – German Green Hydrogen Task Force:

- India has huge **ambitions in energy transition**.

  - It will add 500GW of non-fossil fuel capacity by 2030.

  - India is coming out with bids for green hydrogen.

- Under the agreement which was signed today both countries will establish an Indo-German Green Hydrogen Task Force to strengthen **mutual cooperation** in production, utilization, storage and distribution of Green Hydrogen through building enabling frameworks for projects, regulations and standards, trade and joint **research and development** (R&D) projects.

- India has launched the **National Green Hydrogen Mission** with the goal to make India the global hub of Green Hydrogen production and export.

  - Germany also has developed an ambitious National Hydrogen Strategy with the aim to assume global leadership in hydrogen technologies.

  - Blessed with abundant renewable energy potential and experience of implementing renewable energy projects, India can produce low-cost Green Hydrogen to progressively decarbonize a range of industry sectors, and also export it to meet global demand.

  - With strengths in innovation and manufacturing, Germany is already implementing numerous hydrogen projects.

> **India-Germany:**
>
> - India was the **first country** to end the state of war with Germany in 1951, and therefore was among the first countries to grant the Federal Republic of Germany **diplomatic recognition.**
>
> - Germany established its Consulate General in Mumbai in 1951, leading to the establishment of a full-fledged Embassy in New Delhi in 1952.
>
> - India and Germany maintain a **'Strategic Partnership'** since 2000-01.
>
> - In May 2000, both countries adopted the **'Agenda for the Indo-German Partnership in the 21st Century'**, which includes regular meetings of both Heads of Government as well as annual meetings of the Foreign Ministers.

MISSION SAGAR IX

⊙ **CONTEXT:** **With the overarching aim of providing critical medical aid to Sri Lanka during the ongoing crisis, INS Gharial as part of Mission SAGAR IX reached Colombo.**

About Mission SAGAR IX:

- INS Gharial delivered **over 760 kgs of 107 types of critical lifesaving medicines**.

- In line with GoI's vision of SAGAR – Security And Growth for All in the Region – the Indian Navy undertakes several deployments titled 'Mission SAGAR' **to assist friendly IOR littorals**.

- Since May 2020, Indian Navy has successfully concluded eight such missions, deploying ten ships to 18 Friendly Foreign Countries.

- With a steadfast intent of delivering a high quantum of humanitarian assistance to our neighbours, personnel from ships and shore organisations of Indian Navy have invested close to a million man-hours to bring succour to our friends, overseas.

INDIAN NAVY-MISSION DEPLOYED AND COMBAT READY

What is SAGAR?

- In 2015, India unveiled its strategic vision for the Indian Ocean i.e. **Security and Growth for All in the Region (SAGAR).**

- It is an increasing recognition of the increasing importance of **maritime security, maritime commons and cooperation.**

- The initiative is in line with the **principles of the Indian Ocean Rim Association (IORA)**. The mission aims to

  ➤ to seek a climate of trust and transparency

  ➤ respect for international maritime rules and norms by all countries

  ➤ sensitivity to(towards) each other's interests

  ➤ peaceful resolution of maritime issues

  ➤ increase in maritime cooperation

FRANCE BACKS OUT OF SUBMARINE PROJECT

⊙ **CONTEXT:**

Ahead of PM Modi's scheduled visit, France has denounced its participation in the P-75 India (P-75I) project under which six conventional submarines are to be built in India for the Indian Navy.

Why did France pull out?

- The reason was that the **Request for Proposal (RFP)** requires that the fuel cell AIP be sea proven, which not the case is for us yet since the French Navy does not use such a propulsion system.

- AIP refers to **Air-Independent Propulsion**, a technology for conventional — that is, non-nuclear — submarines.

Project 75 India (P-75I)

- P75I was first cleared in 2007, but lay dormant until now after undergoing numerous changes.

- The P75I project is part of a 30-year submarine building plan that ends in 2030.

  - In 1999, the Indian government approved a plan for the navy to build and induct state-of-the-art indigenous submarines by 2030.

- The project cost is about Rs**. 45,000 crore**.

- As part of this plan, India was **to build 24 submarines** — 18 conventional submarines and six nuclear-powered submarines (SSNs) — as an effective deterrent against China and Pakistan.

- This project envisages the construction of **six conventional submarines with better sensors and weapons and the Air Independent Propulsion System (AIP).**

- The project has been cleared under the strategic partnership model.

- As part of the initial program phase, **India signed a $3.75 billion contract with France's Naval Group to build six Scorpene-class submarines**.

- The next phase of the program is for construction of six conventional submarines with improved sensors and weapons. They must also have an AIP system for better performance.

- Apart from Naval Group, four other companies are part of the bidding: **Russia's Rosoboronexport, Spain's Navantia, Germany's Thyssenkrupp, and South Korea's Daewoo.**

'CHIPKO MOVEMENT' TO SAVE HASDEO ARANYA

⊙ **CONTEXT:**
Local women in Surajpur district of Chhattisgarh started a tree-hugging campaign recently, as trees are being cut for the mining project in Hasdeo Aranya.

Hasdeo Arand Region

- The **Hasdeo Arand Coalfield** is spread over North Korba, south Surguja and Surajpur districts.

- This is **one of the largest intact forest areas in Central India** outside of the protected area system.

- The coalfield **covers a total area of 1878 sq km.** of which 1502 sq km. has forest cover.

- Around 80% of this is covered by **good quality forest** (approximately 1176 sq km has a canopy cover of over 40% while an additional 116 sq km has a canopy cover of over 70%).

- It is also **part of a large elephant corridor** stretching from supporting the migration of wild elephants from Gumla district in Jharkhand to Korba district of Chhattisgarh.

- Hasdeo Arand region is **home to a large and vulnerable population**, most of them being Adivasis and other traditional forest dwellers.

- **Over 90% of the residents are dependent on agriculture cultivation and forest produce for their livelihoods.**

  - The implementation of Forest Rights Act has remained extremely poor till date leaving the population extremely vulnerable to abuse and exploitation.

- It is also the **watershed of the Hasdeo Bango reservoir** on the Hasdeo River, which is a tributary of the **Mahanadi River** and one of the most important rivers of Chhattisgarh.

- The area was declared as a **'No-Go Zone' for mining by the Centre in 2009**. Despite this, mining in the region continued as the policy for the 'No-Go Zone' was not finalised.
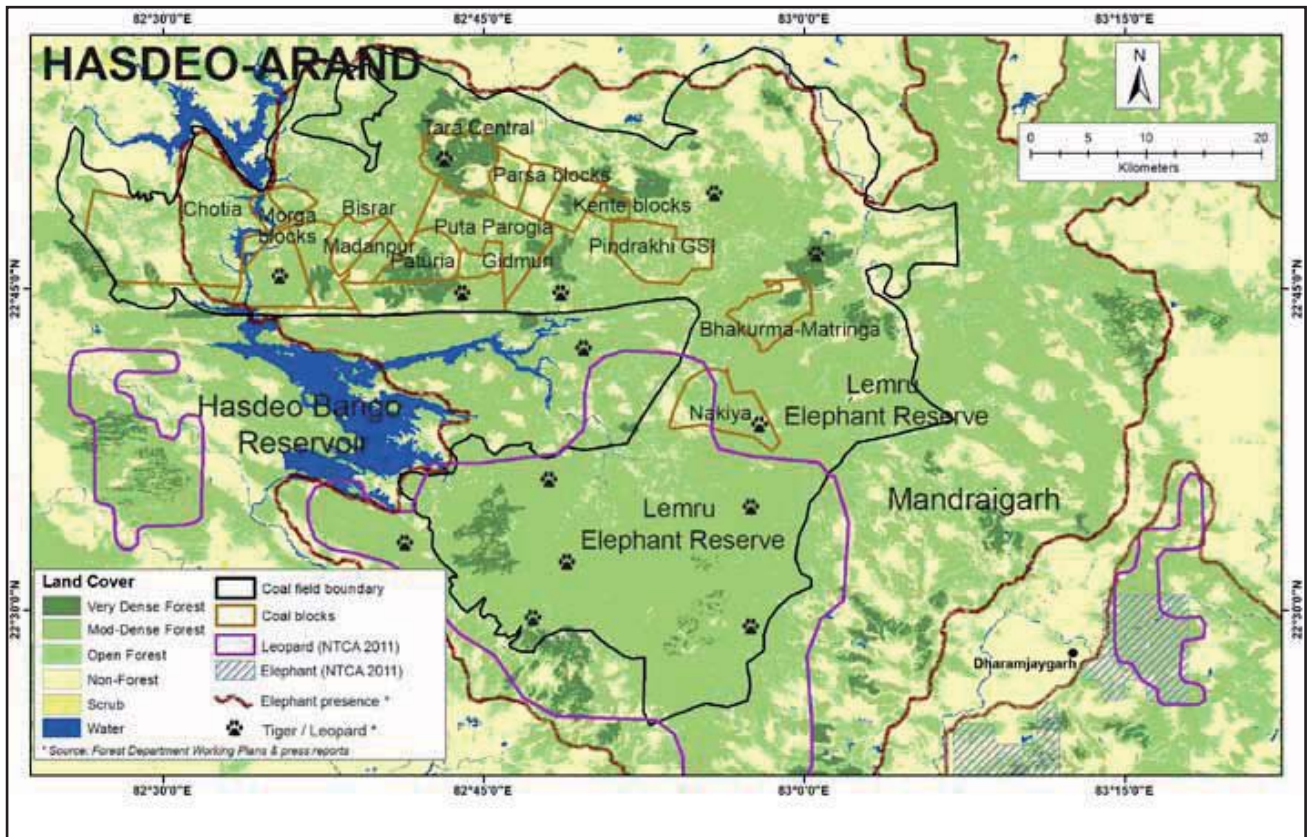
Environmental impact of the Mining Project:

- According to the clearance report by the forest advisory committee, 95,000 trees will be cut for the project.

- But according to our assessment, more than 200,000 trees spread across 841 hectares of forest will have to be chopped down.

- This project, spread over 1,200 hectares, will lead to a displacement of around 700 people from Fatehpur, Hariharpur and Saili villages of the Sarguja and Surajpur districts

INCREASED RISKS OF VIRUSES SPREAD BY MAMMALS

◉ **CONTEXT:**   **A study published by Nature journal has predicted that the rising temperatures and rapid climate change across the globe is likely to drive 15,000 new instances of viruses being transmitted from mammals to mammals by 2070.**

Key highlights of the study:

- A majority of the 10,000 virus species that have the capacity to infect humans are moving silently in the wild mammals at present.

- As the temperature rises, several animal species will abandon their native places and move to cooler land where they will meet several other new species for the first time. This will give rise to virus-transmission among mammals.

- A rise in viruses jumping between species will trigger more outbreaks like the Covid-19 pandemic, posing a serious threat to human and animal health alike.

- The hotspots of virus-jumping will be regions with species-rich ecosystems (particularly areas of Africa and Asia) and areas that are densely populated by humans - India and Indonesia.

- The transfer of viruses and pathogens from animals to humans will take place in densely populated regions of the world.

  ◉ This process has likely already begun, and will continue even if the world acts quickly to reduce carbon emissions and poses a major threat to both animals and humans.

- Thought to be part of the origins of Covid-19, bats are believed to be reservoirs of viruses and will go through virus transmission regardless of climate change.

TORREFIED BIOMASS PELLETS

◉ **CONTEXT:**   **NTPC Ltd has invited Expression of Interest to produce torrefied biomass pellets from Indian startups.**

About:

- It intends to provide a platform to Indian startups to enable them to develop advanced technology for producing torrefied biomass pellets that are well-suited for decentralized small-scale users.

- India produces an estimated 230 Million Metric Tonnes per annum, MMTA of biomass that is either wasted or burnt.

- Biomass co-firing in power plants has proven to be a major solution to cater to this menace thereby reducing carbon footprint in the environment.

- NTPC has been the pioneer in co-firing Biomass in its coal-fired power plants.

Torrefied Biomass Pellet:

- Torrefied biomass pallets are regarded as one of the most efficient biofuel manufacturing processes to produce the coal substitute known as torrified pellets.

- In the torrefaction process, biomass is processed at the temperature of 250-350°C in the absence of oxygen atmosphere, decomposing the Biomass components, preserving energy content so that the energy density of the torrefied biomass becomes in pellet or briquette form which is much higher than other solid biomasses in trade.

- The properties of the final product depend on the torrefication process and on the kind of feedstock are used.

- Depending on factors such as time, temperature and residence time, the biomass can be torrefied to different torrefaction degrees/temperatures.

- Torrefied biomass pellet production needs to be given importance, as torrefied biomass pellet has more energy density, and its characteristics are closer to coal. Further, torrefied biomass pellets will reduce average transportation costs.

Figure 1: Scheme of torrefaction process
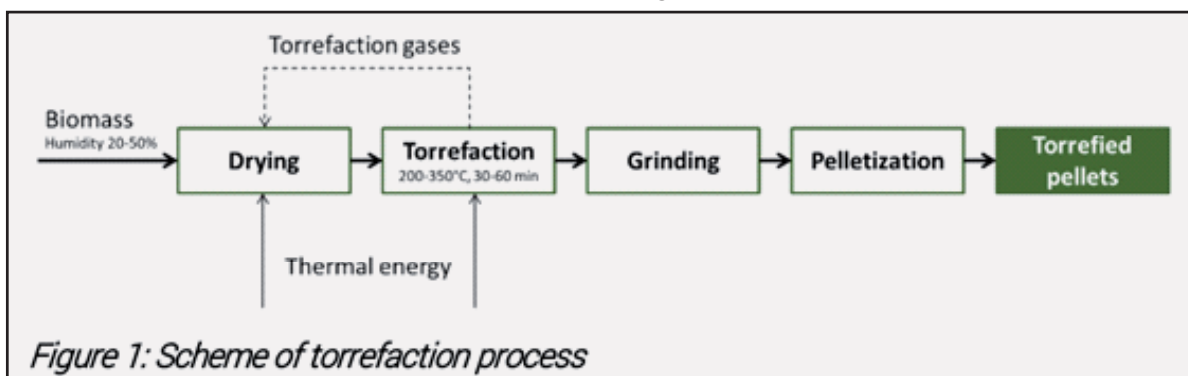
■ **Benefits:**

- Improved combustion properties (Energy content and heating content)

- No biodegradation of the product when stored.

- Increased energy density, significantly low transport cost.

- Increased grind ability, hence requires less energy during processing.

- Reduced CO_2 emissions.
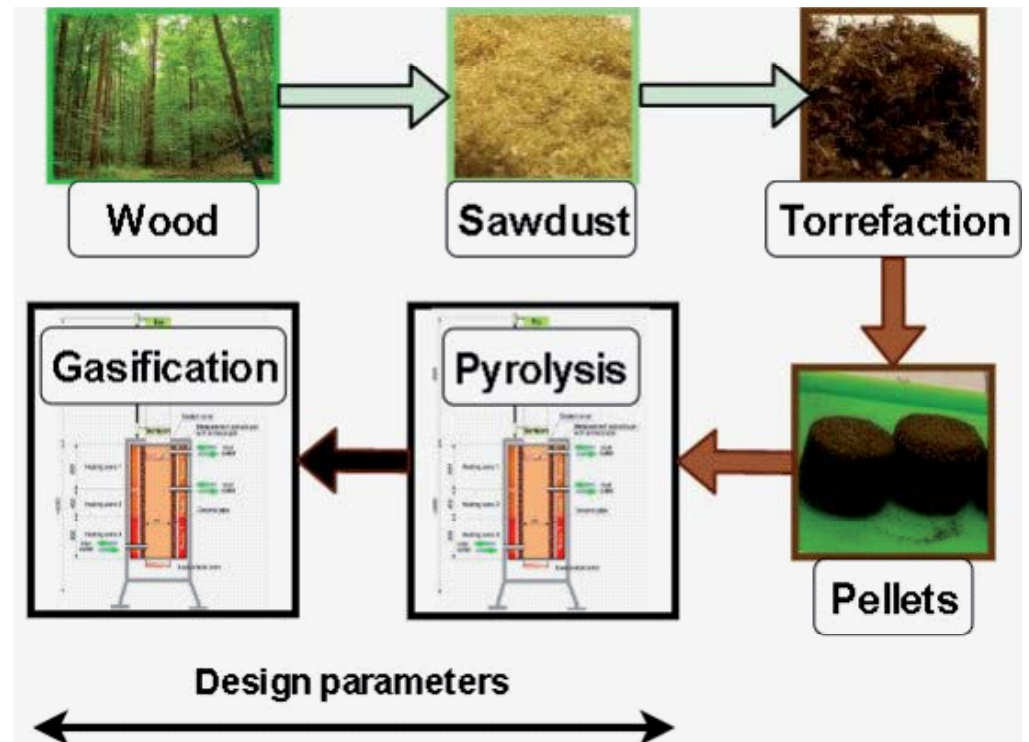
TRADITIONAL WISDOM KEEPS NATIVE SEEDS ALIVE

◉ **CONTEXT:**   **Restoring the link between crop diversity and climate resilience, tribal women in southern Rajasthan's Banswara district have utilised traditional wisdom to preserve indigenous seed varieties, which are on the verge of extinction.**

About:

- A women's group, which has named itself "Saksham Samooh", has taken up the preservation of seeds as a mission in the form of Beej Swaraj or seed sovereignty, helping out the tribal communities with training and guidance.

- The Beej Swaraj philosophy, based on agricultural management with indigenous resources, would succeed in maintaining an appropriate health status for the tribal population.

- The group is supplying seeds to the farmers regularly for cultivation of crops and vegetables.

- The indigenous seed varieties are inherently compatible with the local farming conditions and are economically practical and environmentally more sustainable than the high-yielding varieties being used in agricultural fields.

- Besides, these seeds are pest-resistant and require a very limited use of chemical pesticides.

- Saksham Samooh, based in Sangela village in Banswara district's Garhi tehsil, has utilised traditional techniques for filling the seeds in sacks, sealing them and keeping them in the granary for the next crop season.

SSLV 'DEVELOPMENT FLIGHTS' LIKELY IN 2022

⦿ **CONTEXT:** **Recently, the Chairman of Indian Space Research Organization's (ISRO) announced that indigenous Small Satellite Launch Vehicle (SSLV) will have its maiden development flight in 2022.**

- **The SSLV-D1 Micro SAT will be launched in 2022.**

Small Satellite Launch Vehicle (SSLV)

- SSLV has been designed to meet "Launch on Demand" requirements in a cost-effective manner.

- It is a 3 stage all solid vehicle and it is the smallest vehicle at 110-ton mass at ISRO.

- It can carry satellites weighing up to 500 kg to a low earth orbit while the tried and tested PSLV can launch satellites weighing in the range of 1000 kg.

- It will take only 72 hours to integrate, unlike the 70 days taken now for a launch vehicle.

- Only six people will be required to do the job, instead of 60 people. The entire job will be done in a very short time and the cost will be only around Rs 30 crore.

- It will be an on-demand vehicle.

- SSLV is perfectly suited for launching multiple microsatellites at a time and supports multiple orbital drop-offs.

- New Space India Limited (NSIL) under Department of Space will be the sole nodal agency responsible for providing end to end SSLV launch services for the customer satellite.

MAHARASHTRA GOVERNMENT CLEARS GENE BANK PROJECT

⦿ **CONTEXT:** **Recently, the Maharashtra Cabinet accepted and cleared the proposition of a gene bank that aims to conserve and protect the genetic resources within the state.**

About Gene Bank Project:

- A first-of-its-kind project in India, it will be executed by the forest department of the state.

- The preservation also includes marine and animal diversity, along with the seeds of locally grown crops.

- This project was piloted by the Maharashtra Government's Rajiv Gandhi Science and Technology Commission.

- It will now be continued by the State Biodiversity Board, to ensure the sustenance and growth of the project.

- Aim: to document native natural resources and conserve them with the help of the local community that will ensure not just biodiversity conservation but also inclusion of traditional knowledge.

- The Maharashtra Gene Bank is unique because it has tried to authenticate traditional knowledge by scientific institutions such as the Indian Institute of Science Education and Research (IISER), Pune, and the National Institute of Oceanography (NIO), Goa.

- The government also sanctioned Rs 172.39 crore for implementing the action plan for the next five years.

- Seven main themes identified for the Gene Bank work:

  - Marine biodiversity;

  - local crop/seed varieties;

  - indigenous cattle breeds;

  - freshwater biodiversity;

  - grassland, scrubland and animal grazing land biodiversity;

  - conservation and management plans for areas under forest right, and

  - rejuvenation of forest areas

CERT-IN GUIDELINES FOR CYBER SECURITY BREACH

⊙ **CONTEXT:** **CERT-In has asked all government and private agencies, including internet service providers, social media platforms and data centres, to mandatorily report cyber security breach incidents to it within six hours of noticing them.**

The new directives:

- The directions have been issued **under the provisions of sub-section (6) of section 70B** of the **Information Technology Act, 2000** after CERT-In found certain gaps that were "causing hindrance to incident analysis".

- CERT-In said these directions will enhance "**overall cybersecurity posture**" and guarantee "**safe and trusted Internet**" in the country.

- Under the directions on incident reporting, CERT-In has said that service providers will also have to **provide information and assistance** to CERT-In for any action taken to mitigate the impact of the cyber incident.

  - The information has to be provided in a specified format and time frame, failing which it will be treated as non-compliance, CERT-In warned.

- The new directions issued by CERT-In require virtual asset, exchange, and custodian wallet providers to maintain records on KYC and financial transactions for a period of five years.

  - Companies providing cloud, virtual private network (VPN) will also have to register validated names, emails, and IP addresses of subscribers.

- To ensure the chain of events is accurately reflected in the time frame, service providers have been asked to connect and synchronize all their ICT systems clocks to the **Network Time Protocol (NTP) Server of the National Informatics Centre (NIC) or National Physical Laboratory (NPL).**

  - NTP is a protocol used for reliably transmitting and receiving accurate time sources over TCP/IP-based networks.

  - It is used for synchronizing the internal clock of computers to a common time source.

- CERT-In has also directed service providers to **enable and securely maintain logs of all their ICT systems for a period of 180 days.**

- The cyber incidents that require **mandatory reporting** include everything from phishing attacks, identity theft, data breach, data leak, IoT attacks to targeted scanning of critical networks, compromise of critical systems, defacement of websites, or malicious code attacks such as ransomware, spyware or crypto miners.

CERT-In:

- CERT-In is the **national nodal agency** for responding to computer security incidents as and when they occur.

- The constituency of CERT-In is the **Indian Cyber Community**.

- CERT-In was established in **2004 as a functional organization of the Ministry of Electronics and Information Technology.**

- The **purpose of CERT-In** is to respond to computer security incidents, report on vulnerabilities and promote effective IT security practices throughout the country.

- The Computer Emergency Response Team (CERT-In) has been designated to serve as the national agency to perform the following **functions:**

  ➤ To collect and analyse information on cyber incidents

  ➤ To forecast and give alerts of cybersecurity incidents

  ➤ To provide emergency measures for handling cybersecurity incidents

  ➤ To coordinate cyber incident response activities

  ➤ To issue guidelines, advisories, vulnerability notes and white papers relating to information security practices, procedures, prevention, response and reporting of cyber incidents

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INDIGO USES GAGAN- FIRST AIRLINE

⊙ **CONTEXT:** **India achieved a major landmark when the Airports Authority of India (AAI) successfully conducted a trial applied the latest technology developed by an indigenous satellite based augmentation system (SBAS) called GAGAN (GPS Aided GEO Augmented Navigation) at the Kishangarh airport in Rajasthan.**

- **The IndiGo aircraft flew an aircraft with an Instrument Approach Procedure (IAP) with LPV minima of 250ft, using GAGAN Service.**

- **India is the first country in Asia Pacific Region to achieve this.**

What is GPS Aided GEO Augmented Navigation (GAGAN)?

- It is a **Satellite Based Augmentation System (SBAS)** implemented jointly with **Airport Authority of India (AAI).**

- The main objectives of GAGAN are to provide Satellite-based Navigation services with accuracy and integrity required for civil aviation applications and to provide better Air Traffic Management over Indian Airspace.

- The system will be interoperable with other international SBAS systems and provide seamless navigation across regional boundaries.

- The GAGAN Signal-In-Space (SIS) is available through GSAT-8 and GSAT-10.

- GAGAN is used to provide lateral and vertical guidance when an aircraft is approaching a runway for landing.

  ◉ Its precision is especially useful at small airports where the instrument landing system (ILS) has not been installed.

- In India's civil aviation sector, GAGAN will modernise the airspace, reduce flight delays, save fuel and improve flight safety.

Satellite Based Augmentation System (SBAS)

- The SBAS is a navigation system, which builds on the **Global Navigation Satellite Systems (GLONASS),** and adds to the accuracy and integrity of these navigation tools.

- For aircraft operators, both civilian and military, it means that pilots can land aircraft at smaller airports and airstrips using navigation guidance without expensive instrument-based landing systems being installed on the ground.

Some of the benefits GAGAN is expected to bring for Civil Aviation sector are:

- **Safety benefits** – Vertical guidance improves safety, especially in adverse weather conditions

- **Reduction of circling approaches**

- **Environmental benefits–**Approach with Vertical Guidance procedures will help facilitate better energy and descent profile management during the final approach
- Global seamless navigation for all phases of flight including arrival, departure, oceanic and en route
- Allow direct routings, multiple approaches resulting in considerable fuel savings to airlines and provide for capacity enhancement of airports and airspace

INTERNATIONAL DARK SKY WEEK

⊙ **CONTEXT:** **Astronomers and sky enthusiasts marked the 2022 International Dark Sky Week from April 22-30.**

What is the International Dark Sky Week?

- The International Dark Sky Week is an annual event hosted by the **International Dark-Sky Association (IDA).**

Blinded by the light: how light pollution affects our environment

What is light pollution?

Daily light and dark cycles create a natural rhythm that is important for many organisms. Some species are only active at night, some migrate by night, most set their internal clocks to the changing length of days and seasons.

Sources of pollution
Light pollution disrupts these natural cycles. **Artificial light at night** comes from human sources such as transportation (cars & planes), electric lighting in buildings, houses, and signs.

Sky glow is when the night sky is brightened by diffuse light. Sky glow from artificial light in cities outshines natural sources like the moon.

Not all artificial light is the same. Human light sources differ in intensity, brightness, spectral composition, and timing (street lights, seasonal lights)–all of which change how much different species are affected.

Effects across the tree of life

Not only nocturnal animals are affected. By perceiving light pollution as daylight, the physiology and behavior of many organisms can change.

AMPHIBIANS   BIRDS   FISH
INVERTEBRATES   MAMMALS   REPTILES
PLANTS
HUMANS

Biological consequences

Light pollution influences many levels. For example, it alters:

MOLECULAR RESPONSES & GENE EXPRESSION
Biological clock expression timing

HORMONES & PHYSIOLOGY
Hormone production, metabolism, cardiovascular systems

BEHAVIOR
Sleep/wake time, resource discovery, reproduction, communication

POPULATIONS
Density, gene flow, home range size, intraspecific competition

COMMUNITIES
Predator-prey interactions, food web processes

ECOSYSTEM FUNCTION
Species interaction networks, trophic cascades, nutrient cycling

- International Dark Sky Week provides a wonderful opportunity for people to discover value and beauty in the dark.
- It's a great time to connect with the night and learn about what is at stake if light pollution continues to increase.

- The event aims to raise awareness about the negative impact of light pollution and celebrate the night sky.
- According to IDA, outdoor artificial lighting at night can disrupt wildlife, impact human health, waste money and energy, contribute to climate change, and block views of the universe — when used indiscriminately.
  - Light pollution is increasing at twice the rate of population growth and 83% of the world's population lives under the light-polluted sky

> **International Dark-Sky Association (IDA):**
> - The International Dark-Sky Association (IDA) is the recognized authority on light pollution and is the leading organization combating light pollution worldwide.
> - **Vision:** The night sky, filled with stars, is celebrated and protected around the world as a shared heritage benefitting all living things.
> - **Purpose:** To protect the night from light pollution.

- ### What is Light Pollution?

  - The inappropriate or **excessive use of artificial light – known as light pollution** – can have serious environmental consequences for humans, wildlife, and our climate.
  - Components of light pollution include:
    - **Glare** – excessive brightness that causes visual discomfort
    - **Skyglow** – brightening of the night sky over inhabited areas
    - **Light trespass** – light falling where it is not intended or needed
    - **Clutter** – bright, confusing and excessive groupings of light sources
  - Light pollution is a side effect of industrial civilization.
    - Its sources include building exterior and interior lighting, advertising, commercial properties, offices, factories, streetlights, and illuminated sporting venues.

How bad is Light Pollution?

- With much of the Earth's population living under light-polluted skies, over lighting is an international concern.
- According to the 2016 groundbreaking "**World Atlas of Artificial Night Sky Brightness**," **80 percent of the world's population lives under skyglow.**
- In the United States and Europe 99 percent of the public can't experience a natural night.
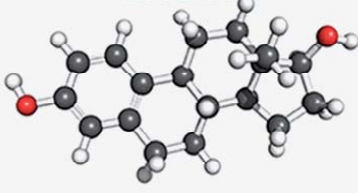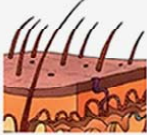
ANABOLIC STEROIDS AND ITS HEALTH IMPACTS

- **CONTEXT:** **From two Tokyo Olympians being banned to Noida Police seizing fake drugs and supplements worth Rs 2 crore, anabolic steroids have often been in news.**

What are anabolic steroids?

- Anabolic steroids are essentially lab-made versions of the male hormone testosterone and have a similar effect of increasing muscle mass as the natural hormone does.
- It also increases male characteristics in a person, such as facial hair and a deeper voice.
- These are, however, very different from the steroids that are prescribed by doctors for inflammations, several autoimmune diseases, or to suppress the body's immune system during a Covid-19 infection.

- ◉ These medicines are called corticosteroids and are lab-made molecules that mimic the action of the hormone called cortisol that controls the body's stress response, metabolism, and inflammation.

- Unlike corticosteroids, anabolic steroids have limited medical use. "Anabolic steroids are mainly misused by athletes and sportspersons nowadays.

- Years ago, it was rampantly used by bodybuilders and was given to them in pudiyas.
  - ◉ Although this practice is fading away, people still take it following the advice of their gym trainers.

What are they prescribed for?

- The anabolic steroids have a very **limited medical role** and are mainly used by doctors to help patients gain weight after a severe illness or injury.

- It could also be prescribed in small doses to the elderly to build muscle mass and in some cases also helps to treat anaemia.

- Doctors may also prescribe the medicine to men who have low levels of natural testosterone.

What are the health impacts?

- Use of anabolic steroids in the short-term can cause acne and hairfall. Extended misuse of the substance can also lead to gynaecomastia (growth of breasts in men) and erectile dysfunction.

- In women, it can lead to growth of facial hair.

- It may also cause extreme anger, paranoia, and impaired judgement.

- Long-term use can lead to kidney disease and even failure, liver damage and tumours, enlarged heart, and high blood pressure.
- It can also lead to stunted growth in teenagers.

ARUNACHAL SCIENTIST BAGS TWO INDIAN PATENTS

⊙ **CONTEXT:**   **A scientist from the Centre of Excellence (CoE) for Bio-resources and Sustainable Development at Kimin in Papumpare district of Arunachal Pradesh has been granted two Indian patents for developing-**

- Polyherbal formulation for the treatment of painful Diabetic Neuropathy
- hybrid cotton patch and a method for its fabrication

About:

- **Dr. Sanjeeb Kalita**, the scientist of the centre under the **Arunachal Pradesh State Council for Science and Technology (APSCS&T)** carried out fundamental research and development for both the inventions at Guwahati-based **Institute of Advanced Studies in Science and Technology.**
- Both the inventions will have a far-reaching impact on the management of painful diabetic neuropathy and broad-spectrum uses as advanced bandage materials respectively

What is a Center of Excellence?

- A COE (Center of Excellence) is a centralized unit of dedicated people with a mission to streamline access to scarce, high-demand capabilities for rapid execution across the business.
- A center of excellence (COE) brings together people from different disciplines and provides shared facilities/resources.
- It is sometimes called a "competency center" or "capability center" in academia.

> **Centre of Excellence for Bioresources and Sustainable Development:**
> - It has been established within a record period of 3 years, with the unstinted support and grant of Rs 49 crores by Department of Biotechnology (DBT), Ministry of Science & Technology, and Government of India.
> - It is the first-of-its-kind "Centre of Excellence" in the Northeast India.
> - The Centre facilitate development of biodiversity and related sectors like horticulture and agriculture.
> - The CoE is working on developing a framework for protecting community rights over traditional knowledge, aiming to provide benefits at the community level.
> - The centre is working on developing valuable inventions by translational research and development on sustainable utilization of the rich bio-resources of the State.

U.S. REPORTS ITS FIRST HUMAN CASE OF H5 BIRD FLU

⊙ **CONTEXT:**   **Centers for Disease Control and Prevention (CDC) recently said that the first known human case of H5 bird flu in the United States has appeared in a person in Colorado.**

About H5 Bird Flu:

- Bird flu or avian influenza is a disease which is caused by avian influenza **Type A viruses** found naturally in the wild birds worldwide.

- The virus can infect domestic poultry which includes chickens, ducks and turkeys.

- **Avian Influenza type A viruses** which are classified based on two proteins on their surfaces:

  ◉ Hemagglutinin(HA)

  ◉ Neuraminidase(NA)

- There are about 18 HA subtypes and 11 NA subtypes.

- Several combinations of these two proteins are also possible e.g., **H5N1, H7N2, H9N6, H17N10, etc.**

- The virus was first detected in geese in China in 1996.

- **Symptoms of avian influenza:** Fever, cough, sore throat, nausea, abdominal pain, muscle aches, diarrhea, vomiting Severe respiratory illness (respiratory distress, viral pneumonia, respiratory failure), Neurologic changes (altered mental status, seizures).

- **Risk groups**: Children and adults below 40 are seen to be the most affected and mortality was high in 10-19 years old.

Is it the first time?

- This is the second human case associated with this specific group of H5 viruses that are currently predominant, and the first case in the United States.

- The first case internationally occurred in December 2021 in the United Kingdom in a person who did not have any symptoms and who raised birds that became infected with H5N1 virus.

- More than 880 human infections with earlier H5N1 viruses have been reported since 2003 worldwide.

  ◉ However, the predominant H5N1 viruses now circulating among birds globally are different from earlier H5N1 viruses.

Bird flu and danger to humans

Bird flu, or avian flu, has a high mortality rate in humans, but as of yet, can not be transmitted from person to person. ... WHO, Feburary 20th, 2006: "Human Infections remain a rare event."

Infection with type A virus H5N1

1 Most virulent bird flu virus; mutates rapidly, altering its genetic material

2 Humans infected by close contact with live infected poultry

3 Birds carry virus and excrete it in feces, which dries, becomes pulverized and then can be inhaled or taken in by touch

4 Humans have no immunity against this virus

Reason for concern

Humans infected with bird flu could serve as a host for a new genetic subtype that can be transmitted from person to person → Might start influenza pandemic

Symptoms

Similar to common influenza

Virus

Fatigue
Fever
Conjunctivitis

Sore throat

Cough

Muscle aches

When untreated

Rapid deterioration; viral pneumonia leading to respiratory distress, kidney failure, multi-organ failure, death

Source: World Health Organization   Graphic: Jutta Scheibe, Morten Lyhne

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GOVERNMENT APPROVES PAWAN HANS SALE AT RS.414 CRORE VALUATION

⊙ **CONTEXT:**

The government recently approved the sale of its stake in Pawan Hans Limited along with transfer of management control to an entity called Star9 Mobility Pvt. Ltd.

What is Pawan Hans and why is it being sold?

- Pawan Hans is a 51:49 **joint venture** between the government and **state-owned Oil & Natural Gas Corp Ltd.**

- The domestic helicopter operator, which mainly serves ONGC's offshore operations and operates a few **UDAN flights** to hilly and difficult terrains, has been making losses.

> **UDAN Scheme**
>
> - 'UDAN' is short for **'Ude Desh ka Aam Naagrik'**, and refers to an extensive regional connectivity scheme in India.
> - The UDAN scheme is aimed at providing affordable air travel on regional routes, while expanding networks and boosting connectivity.
> - Under the scheme, the government in India is providing concessions and financial motivation for airlines to participate, with capped airfares that will be subsidised by the government.

- In 2016, the government decided to disinvest its stake in Pawan Hans. One of the options that were explored was to allow ONGC to acquire the government's stake in the company.

- However, this option did not find traction and, in 2018, ONGC too decided to offer its entire shareholding to the successful bidder identified in the government's strategic disinvestment transaction, on the same price and terms as the government.

- This disinvestment is the second major sale from the government's aviation portfolio in the last 12 months — Air India went to the Tata Group in January this year.

EoI terms for Pawan Hans

	Previous terms	New terms
Shareholding lock-in period	3 years	**1 year**
Asset stripping	After two years	**After 1 year**
Sale and leaseback of helicopters	Not allowed for 1 year	**Allowed for business operations**
Net worth	₹350 crore	**₹300 crore**

What is Star9 Mobility?

- The winning bidder for Pawan Hans is Star9 Mobility Pvt Ltd.

- It is a three-way consortium between Big Charter Private Limited, Maharaja Aviation Private Limited, and Almas Global Opportunity Fund SPC.

- These three entities own 26%, 25%, and 49% stake in Star9 Mobility respectively.

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SECTION: C
(QUICK FACTS)

INDIA'S SNOW LEOPARD ACTIVIST DR. CHARUDATT MISHRA WINS UK AWARD

⊙ **CONTEXT:**   **Dr Charudutt Mishra has won a prestigious nature award in London.**

⊙ **ABOUT:**

- He was presented the 100,000 pounds Whitley Gold Award from **UK wildlife conservation charity Whitley Fund for Nature (WFN),** which supports grassroots conservation leaders.

- The award is geared towards enabling the "ground-breaking" snow leopard conservationist to replicate ethical community engagement on every continent.

- The conservationist's pioneering approach has been named an "outstanding conservation practice" by the UN Biodiversity Conference, in recognition that collective, locally-led conservation is essential to realising government ambition of protecting 30 per cent of the planet by 2030.

- He established India's first community-based initiatives to save the **endangered species of snow leopards.**
  - These include innovative livestock insurance programmes to boost income and discourage retaliatory killings, and locally-managed wildlife reserves on community land.

- Winning his **original Whitley Award in 2005**, and several follow-on grants from WFN since, his team currently work directly with local people across nearly 60,000 sq. miles in some of the world's most extreme environments.

- An estimated 6,500 wild snow leopards remain, prowling the high mountains and plateaus of 12 countries including **India, Russia, Afghanistan, China, Pakistan and Mongolia.**

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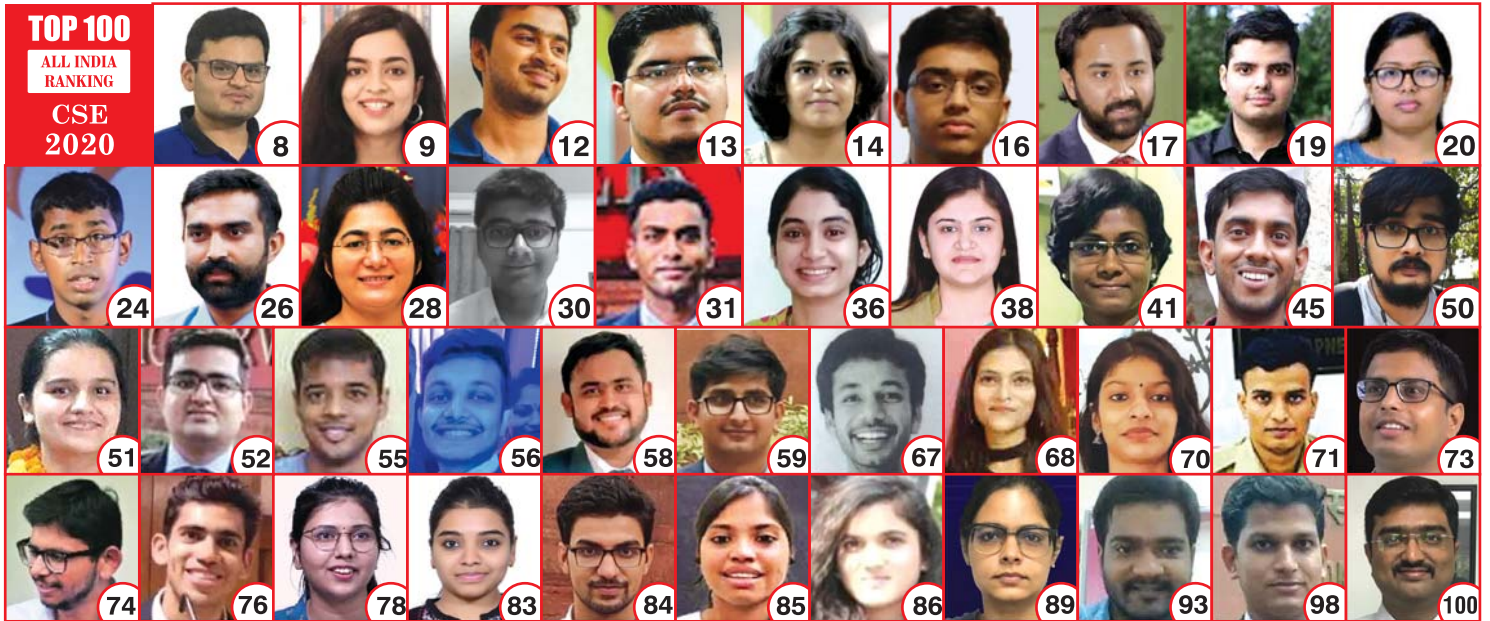- ☑ Public Administration
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