CURRENT AFFAIRS
WEEKLY

WEEK: 5
APRIL 2022

MAINS

GS-II
- INDIA – UK & THE CHANGING DYNAMICS
- EU APPROVED DIGITAL SERVICES ACT TO REGULATE LARGE MULTINATIONAL TECH COMPANIES' ACTIVITIES
- NEIGHBOURHOOD "FAST" POLICY
- 'MISSION ANTYODAYA' & ITS PROGRES
- A SPLINTERED 'NERVE CENTRE' (THE CASE OF URBAN GOVERNANCE)
- APPOINTMENTS OF VICE-CHANCELLOR: NEW ARENA OF TURF WAR BETWEEN CENTRE AND STATES
- NITI AAYOG, UNICEF INDIA SIGN STATEMENT OF INTENT ON SDGS WITH FOCUS ON CHILDREN
- SC MOOTS DEEPER SCRUTINY BEFORE AWARD OF DEATH PENALTY
- SC UPHELD 'PAVEMENT DWELLERS' RIGHT

GS-III
- MINISTRY, UNDP SIGN PACT ON SDGS
- GOVERNING NIDHI COMPANIES
- INDIA POST PAYMENTS BANK LAUNCHES 'FINCLUVATION'
- THE SPECIAL PURPOSE ACQUISITIONCOMPANIES (SPACS)
- COVID-19 SURGE PREPAREDNESS WITH AI,GENOMIC SURVEILLANCE
- EXPERT BODY NEEDED ON MAN-ANIMAL CONFLICT: HOUSE PANEL
- WILDLIFE PROTECTION (AMENDMENT) ACT
- AGRO-FORESTRY & ITS SOCIO-ECONOMIC IMPACT

PRELIMS

ART & CULTURE
- The biography of Azhvars
- 90th anniversary of Sivagiri pilgrimage and Golden Jubilee of Brahma Vidyalaya

GEOGRAPHY
- Pre-eruption warning signals at Whakaari White Island and other active volcanoes

POLITY & GOVERNANCE
- PM confers Prime Minister's Awards for Excellence in Public Administration
- A mistaken decision (GovernmentOrder (GO) 111)
- Centre to soon introduce 'Ayush Visa' for foreign nationals
- Ceasefire with 3 Naga groups extended
- India's designation by the USCIRF
- Raisina Dialogue 2022
- The quarrel over Kuril Islands

ECONOMY
- Union Agriculture Ministry launches 'Kisan Bhagidari, Prathmikta Hamari' campaign
- World's first crypto-backed payment card launched

ENVIRONMENT
- Scientists discover new eel species from Kerala, Bengal
- India's first pure green hydrogen plant commissioned in Jorhat
- Crimson Horned Pheasant seen after 90 years
- 8th National Level Pollution Response Exercise by Coast Guard-NATPOLREX
- Coastal erosion is cause of worry

SCIENCE & TECHNOLOGY
- Russia announces successfully test-launched of Sarmat intercontinental ballistic missile
- Submarine Vagsheer and its features, capabilities
- Blue Straggler Stars
- WHO says at least one child has died after increase of acute hepatitis cases in children
- Postpartum Depression
- ISRO to conduct RLV landingexperiment soon
- Genetically modified mosquitoes for controlling vector-borne diseases? Successful trial gives hope
- NASA rover 'Perseverance' captures eclipse involving Mars' satellite 'Phobos'
- Indian Coast Guard's Urja Pravaha inducted at Gujarat's Bharuch
- What a new research about Jupiter's moon Europa means
- Tea mosquito bug destroys Cashew crop
- Gir awaits locally made CDV vaccine for lions, experts divided on outcome
- First human case of H3N8 bird flu
- Planet Parade
- BEL and HAL sign deal for IRST

— 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.

CONTENTS

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SECTION: A
(MAINS)

CURRENT AFFAIRS

INDIA – UK & THE CHANGING DYNAMICS

CONTEXT:

UK Prime Minister Boris Johnson visited India and met his Indian counterpart Narendra Modi, where both the leaders reiterated their commitment to cooperate on defense and security issues.

⊙ BACKGROUND:

- Historically India was colonized under British rule for around two hundred years.

- British rule ended nearly 200 years later with Jawaharlal Nehru's famous speech on India's "tryst with destiny" at midnight on 14 August 1947.

- Today, India and the UK share a strong and multi-dimensional strategic partnership.

- Following India's **economic reforms in the early 1990s** that placed the Indian economy on a high growth trajectory, the two countries have taken several initiatives to expand bilateral relations.

- Recent developments after COVID and **Brexit** and in between power aspirations and territorial claims of various nations India and UK has decided to collaborate in various front including **Climate and Indo Pacific Region.**

> **Brexit**
> - On January 31, 2020 the United Kingdom left the European Union.
> - The UK was the first country to leave the EU and this was known as Brexit - British exit.
> - Brexit happened because a public vote - or referendum - was held in June 2016, to decide whether the UK should be in the EU.

- After the **Brexit** in 2020 UK has signed a **Roadmap 2030** for the future **India UK relation** which has the potential to elevate the relations into a **Comprehensive Strategic Partnership.**

- To advance trade and investment relations, they have formally launched negotiations for a **free trade agreement (FTA**) on January 13, 2022 and the first round of talks have been concluded on January 28, 2022.

- This brief aims to review and analyse the changing relations between India and the UK.

⊙ ANALYSIS:

Key-takeaways from the recent visit

- This was first visit to India as Prime Minister of the United Kingdom and follows his Virtual Summit with Prime Minister Modi in May 2021 where both leaders agreed to elevate India-UK relations to a **Comprehensive Strategic Partnership.**

- The two countries agreeing to conclude the **third round of negotiations** on **new free trade agreement** by the end of October.

- The deal in the works, like India's other regional and bilateral trade agreements is quite ambitious.

- India and the UK agreed to **double trade in goods and services** to about $100 billion by 2030.

India-UK relations in this contemporary times

- **India – UK relations can be divided into 6 major pillars**
  - ➤ People to people contact
  - ➤ Trade and commerce
  - ➤ Defense and security
  - ➤ Clean energy
  - ➤ Health
  - ➤ Multilateral Cooperation

1st Pillar: Connecting the people

- **Student Exchange program and scholarship program:** India and UK has initiated student exchange program and scholarship program which will help the youth of both the nations to share their knowledge and research skills.

- **Strategic Futures Forum:** Exchange of parliamentarians, judges and administrative officials between two democracies that will help to promote democracy and improve the institutions of democracy.

- **Bilateral Extradition and Mutual Legal assistance:** Both the nations have decided to enhance the extradition and mutual legal assistance treaties and fasten up the process.

- **Migration and Mobility Partnership (MMP):** Both the democracies have decided to work intensively on Migration and Mobility program and consular cooperation among the nations to improve people to people contact, securing the interest of the diaspora and exchange of culture.

- **Mutual recognition of professional degrees:** India and UK are also collaborating on mutual recognition of professional degrees that can improve the service sector trade balance.

2nd Pillar: Trade and Commerce

- **Comprehensive Free Trade Agreement:** Recent visit of UK Prime Minister to India has directed the path and time line of comprehensive Free Trade Agreement, which can be expected to conclude before Diwali, i.e., October 2022.

- **Enhanced Trade Partnership:** Both the leaders have agreed to work and collaborate on Enhanced Trade Partnership to improve the trade volume and value in the future.

- **Collaboration in tax administration:** UK has promised to collaborate in tax administration of India to improve the tax administration and make the administration cost effective and efficient.

- **Investment in social and capital sectors:** Prime Minister of UK has also promised to encourage UK's investors to invest in India's social and capital sector, i.e., education and health and also the industries.

- **Economic and Financial Dialogue:** Both the nations have initiated Economic and Financial dialogue and highlighted the success of GIFT city.

- **Global Innovation partnership**: Both the nations have finalized the India-UK Global Innovation Partnership.

- **Smart and sustainable Urbanization:** To promote sustainable livelihood two countries are collaborating in Smart and Sustainable Urbanization front to ensure disaster resilient city infrastructure.

- **Space and Nuclear domain:** UK and India will also collaborate in space and nuclear energy.

3rd Pillar : Defence and Security

- **Secure Indo Pacific and Indian Ocean region:** Both the nations demanded for secure safe and free Indo Pacific region and Indian Ocean Region. International waters should be rule based and all nations should have equal claims.

- **Defence and International Security Partnership (DISP):** Enhancing the collaboration in defence sector both the nations have decided to collaborate in defence technological development and research and improve the cooperation in DISP.

- **Joint Military Exercise:** Bilateral military exercises will be increased and more focused on to secure the Indo Pacific region and Indian Ocean Region

  ➤ KONKAN SHAKTI: it is one of the major joint exercises between India and UK. It is a Tri-service joint exercise (Army, Air Force and Navy).

- **Cyber Security and counter Terrorism:** Both have welcomed the Joint Working Group on Counter Terrorism and proposed to secure the cyber space.

4th Pillar: Climate Change and Clean Energy

- **Collaboration** at UNFCCC for enforcing Kyoto Protocol and Paris Agreement

- **Clean energy:** Two nations proposed to support the Green Grids Initiatives (One Sun One World One Grid) to reduce the dependency on carbon emitting power sector and take a shift towards renewable energy sources.

  ➤ **Climate finance Leadership Initiative** and climate finance are two major fronts where two nations have decided to cooperate.

- **Coalition for Disaster Resilient Infrastructure**

- **Waste Management:** UK has promised to provide a sustainable solution for waste management to India and provide a circular economy.

5th Pillar: Health

- Boost up Health services and preparedness for health emergencies

- Coalition for Epidemic Preparedness Innovation

- Health worker mobility

- Ayurveda and alternate medicines

6th Pillar: Multilateral Engagements

- **At WTO:** Both the nations will cooperate at WTO on their shared goals and values including improving trust and confidence in multilateralism along with various multilateral trade dialogues between India and UK.

- **Democracy:** Both the nations will cooperate to spread the ideals of democracy among the nations.

- **At UN:** At UN and its various organizations both the nations will collaborate to implement rule based international order and respecting sovereignty of every independent state.

- **Counter Terrorism:** Both the leaders have agreed against zero tolerance on terrorism.

- **UNSC:** At Security Council both will engage for its better representations and implementation of rule based order all over the world.

How the relations got benefitted?

- India and UK has signed the **Road Map 2030 agreement** last year which has put the broader idea of these agreements and elevate to a Comprehensive Strategic Partnership.

- Student exchange program and mutual recognition of professional degrees will fill the vacuum that has been created in UK in post Brexit era, along with India's service sector trade and export will increase will improve the trade balance.

- Defence and security cooperation will help India to improve domestic defence capability under **Aatmanibhar Bharat Abhiyaan**. Apart from attaining self-dependency on defence sector India will be able to diversify the defence trade and could have a clear stance in Indo Pacific Region.

- To improve the tax administration and tax base India will get a supportive action from UK to make the tax administration more cost effective and efficient.

- Shared democratic value and exchange of institutional heads between both the countries will enhance the institution for democracy stronger.

- Collaboration in health sector will improve the health sanitation condition for India and will boost up the **Swachh Bharat Abhiyaan.**

- Terrorism is a threat to human civilization, both the nations have been severely affected by the terrorism. Zero tolerance to terrorist activities will help India to manage its Sovereignty and integrity.

- Emphasis on Ayurveda and alternate medicines will reduce the dependency on Active Pharmaceutical Ingredient.

- Consular collaboration and MMP initiative will help to share the culture of the two nations that will help to improve the diaspora of both the nations.

What are areas that remained untouched and what India should do?

- **Blue economy:** Brexit has also impacted the fishing industries in UK. India could promote its blue economy to fill the gap in UK and secure the income for the fishermen.

- More Collaboration in Middle East to secure sovereignty of every nation.

- Emphasizing on climate change prevention and mitigation methods

- At UNSC both should collaborate for its reform and increase the representation in line with contemporary geo politics.

- India should remain neutral and non-aligned in each front of the geo political relations.

- Enhance bilateral relations with other EU nation countries.

- National interest must be the top priority to maintain a balance.

- Promoting ideals of **Panchsheel Principles**, non-violence and respecting sovereignty of every nation.

◉ CONCLUSION:

India's relation with UK can traced from the colonial period. After independence India has adopted **Poorna Swaraj** in case of economic, political and social front. Two hundred years of legacy had played a central role for the **India-UK relation**. In the changing geo political dynamics India should maintain a fine balance between each country from where India's national interests are fulfilled. **Aatmanirbhar Bharat** in social, defence health and several other sectors, UK relation could enhance the program and initiatives taken by the government of India under the **Aatmanirbhar agenda**.

> **Practice Questions**
>
> 1. Amid a changing strategic scenario, India and UK are trying to give new shine to old ties. Elucidate.
>
> 2. UK is trying to reinvent itself post Brexit. In this changing milieu, there is a new opportunity in furthering India-U.K. socio-economic ties. Analyze.

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EU APPROVED DIGITAL SERVICES ACT TO REGULATE LARGE MULTINATIONAL TECH COMPANIES' ACTIVITIES

CONTEXT:

In a major development that could alter the entire social media landscape, the European Union has finally reached consensus on the Digital Services Act (DSA) to increase the regulation on social intermediaries.

⊙ BACKGROUND:

- European Union has introduced **E-commerce Directive in 2002** to regulate over the e-commerce platforms.

- Now, it has passed the new act to fill the gap and flaws remained untouched by the decade old act.

- With this, the European Union has continued its campaign to regulate large multinational tech companies' activities in Europe.

- The **Digital Services Act (DSA),** which was approved by the **European Parliament**, follows the **Digital Markets Act (DMA)**.

- The DSA and DMA have two big goals:
  - ➤ create a safer digital space in which the fundamental rights of all users of digital services are protected
  - ➤ establish a level playing field to foster innovation, growth, and competitiveness, both in the European Single Market and globally

- In practice, this means overseeing how large social networks, search engines, and other tech companies do business, and limiting how they use consumer data.

⊙ ANALYSIS:

Why new legislation is needed?

- E-commerce directive rules covered the broad ideas and objectives that was significant during that decade.

- With technological shifts the decades old legislation lacks some scope of legislation which needs to be fulfilled.

- **Untouched scope of the legislation**
  - ➤ Taxation
  - ➤ Processing of Personal data
  - ➤ Protection of privacy in the electronic communication.

What is the new law?

- Digital Services Act along with Digital Markets Act will replace the decade old legislation **E-Commerce directives of 2002**

- Digital Services Act (DSA), a landmark legislation to force big companies to act against disinformation.

- DSA ensures regulation over way intermediary.

What is EU Digital Service Act?

- The DSA is a digital regulation that follows the principle of **'what is illegal offline must also be illegal online'** and aims to stop the dissemination of illegal content as well as protecting the fundamental rights of EU citizens.

- The DSA will tightly regulate the way intermediaries, especially large platforms such as Google, Facebook, and YouTube.

- It aims to legislate against the spread of illegal content and to add further measures for ensuring the protection of the fundamental rights of European citizens.

- The regulation includes specific requirements for the protection of minors, online marketplaces, online platforms, and search engines, with stricter requirements implemented proportionately for
  - ➤ 'very large online platforms' (VLOPs)
  - ➤ 'very large online search engines' (VLOSEs)

- The DSA also includes rules for the use of misleading interfaces, including **Dark Patterns**, and for transparency in the use of recommender systems.

- Some of the rules set by the DSA are similar to those in India's **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**, also known as the IT Rules, 2021.

- In India, the IT Rules, 2021, made it mandatory for 'significant' social media intermediaries, or online platforms with more than 5 million registered users in India, to appoint a grievance redressal officer.

• The latter is required to acknowledge a user's grievance within 24 hours of receipt of the complaint, and offer a resolution in the next 15 days.

➤ **Example:** A typical example of a dark pattern is the gated content that does not allow you to access a website as sign-up is the only option if you wish to continue.

What are the provisions?

◉ **Applicability**: DSA will apply to a "large category of online services, from simple websites to Internet infrastructure services and online platforms."

◉ **Faster removal:** Online platforms and intermediaries will have to add "new procedures for faster removal" of content deemed illegal or harmful.

◉ **Risk reduction analysis**: This law has mandated the companies to have a risk reduction analysis to reduce the incitements in the society. The potential risks that DSA has provisioned are:

➤ Dissemination of Illegal Content

➤ Adverse effect on fundamental rights

➤ Gender based violence

➤ Serious consequences of mental and physical health

◉ **Dark Pattern Ban:** New legislation has proposed to ban the **Dark Pattern** and misleading interface specially pop ups which creates discrepancies to the consumers and targeted advertising

Dark Pattern

• The dark patterns in UX design are tricks used to manipulate and redirect a user to perform a forced action, which they do not intend to perform.
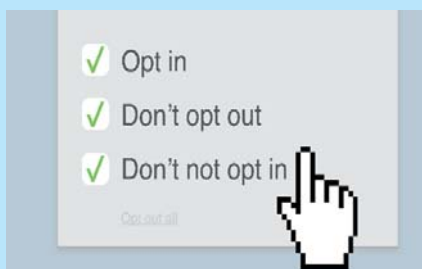
◉ **Access to public data:** The Act proposes to allow independent vetted researchers to have access to public data from these platforms to carry out studies to understand these risks better.

◉ **Strong protection**: The law proposes stronger protection for minors, and aims to ban targeted advertising for them based on their personal data.

◉ **Transparency measures:** It also proposes "transparency measures for online platforms on a variety of issues, including on the algorithms used for recommending content or products to users".

◉ Finally, it says that cancelling a subscription should be as easy as subscribing.

◉ CONCLUSION:

European Union has proposed to adopt the new legislation regarding the e commerce services to protect the interest of the public and increase the regulations on unlawful content posted on the social media. The new law focuses on minors and gender based violence in the society, to improve the social harmony and reduce the social violence new legislation has increased the liability of the way intermediary regarding removal of any unlawful content. Apart from such restrictions DSA also creates a balance and provides a safe harbor to these big way media platforms.

Practice Questions

1. India and the EU aim to operationalize their natural strategic partnership by establishing Trade and Technology Council. Comment.

2. Indian Diaspora can play a constructive role in strengthening India- EU relationship. Elaborate.

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NEIGHBOURHOOD "FAST" POLICY

CONTEXT:

New Delhi now stepping up engagement with India's neighbours as a part of 'Neighbourhood first policy', now by shifting towards the 'Neighbourhood Fast Policy' declared at the South Asian economic conference.

The conference was organised by the Foreign policy Think tank and Research and Information System for Developing countries (RIS) in the capital.

Understanding the concept of 'Neighbourhood Fast Policy'

India shares its boundary with nations that vary in strength, resources, and size that includes **Bhutan, Afghanistan, Maldives, Bangladesh, Sri Lanka, Nepal, and Pakistan.**

- The Minister for state for external affairs (MOS) has called for the "**Neighbourhood fast policy**" to ramp up the connectivity between the **neighbouring countries.**

- It also said that South Asia is **the world's least** connected region and has the lowest level of interconnectivity.

- To achieve the faster connectivity it is necessary to strengthen regional **multimodal connectivity** with **digital and financial** connectivity in the region.

- India's neighbourhood policy has revolved around **national security issues and economic development** encouraged by its historical strategic, culture and furthered by the desire to become a global power.

What is Neighbourhood First Policy?

- **Neighbourhood First Policy of India** is a core component of India's foreign policy.

- It focuses on peaceful relations and collaborative synergetic co-development with its South Asian neighbours of the Indian subcontinent encompassing a diverse range of topics, such as

  ➤ Economic

  ➤ Technology

  ➤ Research and education

  ➤ Connectivity (digital, surface and air transport, energy grid connectivity, logistic chains, etc)

  ➤ Space program

  ➤ Defence security

  ➤ Environment

  ➤ Climate challenge

- This policy creates new avenues as well as leverages existing regional cooperation initiatives, such as **SAARC, SASEC, BBIN, and BIMSTEC.**

- **It compliments India's Look East policy focused on Southeast Asia and Look West Policy focused on Middle East.**

Salient features of the Neighbourhood First Policy:

- **Immediate priority to neighbours**: Priority is to improve the relations with immediate neighbours as peace and tranquillity in South Asia is essential for realizing development agenda. The neighbourhood first policy of actively focuses on improving ties with India's immediate neighbours.

- **Dialogue:** It focuses on vigorous regional diplomacy by engaging with neighbouring nations and building political connectivity through dialogue. First initiative in this direction was extending an invitation to all heads of government of SAARC countries for the oath taking ceremony of the Prime minister in 2014.

- **Resolving bilateral issues**: Focus is on resolving bilateral issues through mutual agreement. For instance, India and Bangladesh have signed a pact to operationalise the historic Land Boundary Agreement (LBA).

- **Connectivity**: India has entered into MoU with members of the South Asian Association for Regional Cooperation (SAARC). These agreements ensure a free flow of resources, energy, goods, labour, and information across borders.

- **Economic Cooperation**: It focuses on enhancing trade ties with neighbours. India has participated and invested **in SAARC** as a vehicle for development in the region. One such example is the **Bangladesh-Bhutan-India-Nepal (BBIN) grouping** for energy development i.e. **motor vehicles, waterpower management and inter-grid connectivity**.

- **Technical Cooperation**: The policy put emphasis on technical cooperation. Recently a dedicated SAARC satellite was developed to share the fruits of the technology like **tele-medicine, e-learning etc. with the people across South Asia.**

◉ **Disaster management**: India's offer cooperation on disaster response, resource management, weather forecasting and communication and also capabilities and expertise in disaster management for all South Asian citizens. For example, India provided immense **assistance to its neighbour Nepal** in the aftermath of the 2016 **earthquake.**

◉ **Military and defence cooperation**: India is also focusing on deepening security in the region through military cooperation. Various exercises like **Surya Kiran** with Nepal, **Sampriti with Bangladesh** aim to strengthen **defence relations**. Also, India has committed to play a greater role in capacity building of the Afghan National Army by providing training to them.

Why India puts its neighbourhood first?

◉ **Geostrategic importance:** The country's **geopolitical and geostrategic location** has prompted New Delhi to pursue unique relations with neighbours.

◉ **Disturbed history:** Important turning points in the history of relations have been **India's nuclear tests** of 1998, the **Kargil War of 1999 and the 2001 terrorist attacks in the US** and on the Indian parliament.

◉ With the background of **Gujarat's development model** and inspiration from **the 'Gujral Doctrine'**, Prime Minister has embarked on a pragmatic and proactive policy of putting the "**neighbourhood first".**

Gujral Doctrine

● The Gujral Doctrine is a set of five principles to guide the conduct of foreign relations with India's immediate neighbours as spelt out by **I.K. Gujral** (12th prime minister of India from April 1997 to March 1998), first as **India's foreign minister** and later as the **Prime Minister.**

● These principles are:

➤ first, with neighbours like Bangladesh, Bhutan, Maldives, Nepal and Sri Lanka, India does not ask for reciprocity, but gives and accommodates what it can in good faith and trust

➤ second, no South Asian country should allow its territory to be used against the interest of another country of the region

➤ third, no country should interfere in the internal affairs of another

➤ fourth, all South Asian countries must respect each other's territorial integrity and sovereignty

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➤ finally, they should settle all their disputes through peaceful bilateral negotiations

◉ It now seems clear that India's "neighbourhood first" policy, which accords primacy to nations in India's periphery, includes in its ambit the **Bimstec—**a grouping that includes almost all countries of South Asia and some in **South-East Asia.**

Challenges for India

◉ **Relation with Pakistan**: Relation with Pakistan, remains India's biggest diplomatic and security challenge. India's challenge is to manage relationships with a state which, openly, uses terror as an instrument of state policy and has fractured, multiple power centres.

◉ **Unstable Afghanistan**: Afghanistan remains a challenge too. Fragile within and facing state-sponsored external threat from Pakistan, a possible state collapse would spawn **jihadist terrorism** in all directions from which India is unlikely to remain immune. Indian diplomacy is active in international efforts to stabilise the country.

◉ **China:** China is another big challenge that is increasing its presence around India. The relationship is marked with suspicion over China's policy towards Pakistan, including the construction of **the Gwadar port**. Also, China-Pakistan **economic corridor running through POK.**

◉ **Anti-Indian sentiments**: Anti-Indian sentiments are getting rooted in the minds of people of region due to perceived notion of India's big brother attitude and its economic dependence to India. For instance, the recent step **of Demonetization** impacted many countries like **Nepal, Bangladesh, Bhutan, Sri Lanka**, and **Myanmar** which use the Indian currency as a parallel currency within their borders.

Required measures

◉ India's immediate neighbourhood directly impacts it **geopolitically, geo-strategically and geo-economically because of its vicinity.** Thus, working with them is important for India to rise as a superpower. Emphasis must be on **sustainable and inclusive development. Strengthening the measures such as;**

◉ **Transportation:** As the largest country, India should be leading to establish cross-border transport and communication links.

◉ **Developing Markets:** India should work with its neighbour in strengthening their markets and its own infrastructure to its neighbours.

- **Dialogue:** India must ensure its neighbour of continuous support for their development. Efforts must be made to strengthen Indian exports in the region.

- **Soft power:** India's soft power and common culture provide an opportunity for India to strengthen its cultural roots further in the region.

⊙ CONCLUSION

India's foreign policy in the region is based on the principles of **respect, dialogue, cooperation, peace and prosperity.** Trust deficit at the borders must be restored to fulfil the India's vision. The need of the hour is to speed up the connectivity for strong ties and for resolving issues between the neighbours.

Practice Questions

1. South-east Asia holds great geo-strategic significance for India. In context of this statement, discuss the need to shift from "Neighbourhood First" to "Neighbourhood Fast" policy.

2. 'The time has come to repair the complex India-Nepal relationship.' Examine the statement in the context of India-Nepal-China matrix.

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'MISSION ANTYODAYA' & ITS PROGRESS

CONTEXT:

Given the right momentum, the 'Mission Antyodaya' project of the Government of India bears great promise to revive the objectives of these great democratic reforms.

What is Mission Antyodaya?

- Mission Antyodaya was adopted in Union Budget 2017-18.

- It is a convergence and accountability framework aiming to bring optimum use and management of resources allocated by 27 Ministries/ Department of the Government of India under various programmes for the development of rural areas.

- It is a comprehensive and accountability framework which aims to bring transparency and targeted convergence of resources towards development of rural areas.

- It is envisaged as state-led initiative with Gram Panchayats as focal points of convergence efforts.

- **Annual survey** in **Gram Panchayats** across the country is an important aspect of Mission Antyodaya framework.

  ➤ It is carried out coterminous with the People's Plan Campaign (PPC) of Ministry of Panchayat Raj and its' purpose is to lend support to the process of participatory planning for Gram Panchayat Development Plan (GPDP).

- Mission Antyodaya therefore is focused on ensuring the deliverance of social justice to the people of India through local bodies.

- **Nodal Agency:** The **Ministry of Panchayati Raj** and the Ministry of Rural Development act as the nodal agents to take this mission forward.

> **People's Plan Campaign (PPC):** The People's Plan Campaign is an effective strategy for ensuring the preparation of GPDP in a campaign mode.
>
> PPC will be rolled out as 'Sabki Yojana Sabka Vikas' in 2020.

What provisions of the Indian Constitution make local bodies the vector for Socio-Economic Development?

- **Articles 243G and 243W of the Constitution of India** mandates the local governments to prepare and implement plans for economic development and social justice.

- The creation of local self-governing bodies themselves, through the **73rd and 74th Constitutional Amendment Act**, were done to take economic growth and social justice to the doors of people.

- Several institutions have been created and measures taken by the government of India (such as the gram sabha, the District Planning committee (DPC), the State Finance Commission (SFC) etc to achieve the dream of social justice for all.

- **District Planning Committee:** It is a committee created as per **Article 243ZD** of the Constitution of India at the district level for planning at the district and below.

- The Committee in each district should consolidate the plans prepared by the Panchayats and the Municipalities in the district and prepare a draft development plan for the district.

What circumstances made it necessary for the government to launch Mission Antyodaya?

- The Socio-Economic and Caste Census (SECC) 2011 showed a very unpleasant picture of rural India.

- Most of the rural households had no salaried jobs, were landless, many had no adult member to support (female-headed households), suffered multiple deprivations, engaged in manual casual labour, no room or only one room to live, and so on.

What were the findings of Mission Antyodaya Survey 2019-20?

- Gap Report and the Composite Index (which calculates Human Development) of Antyodaya Survey 2019-20 show that the goal Economic Development and Social Justice remains far from being achieved.

- This implies that the time line set to make 50,000 gram panchayats poverty free has to be extended beyond 2022.

> - Former Finance Minister Arun Jaitley had announced that 50,000 gram panchayats will be poverty free by October 2019 (150th Birth Anniversary of Mahatma Gandhi).

- But the same could not be achieved and the time for achieving this target had to be revised to August 2022 (75th Anniversary of Indian Independence).

What is the way forward?

◉ The data collected by Mission Antyodaya clearly shows that more efforts needs to be put in if rural-urban disparity has to be reduced.

◉ A better convergence of different Ministries and co-ordination between state and centre is required for welfare schemes to bear fruits and hence benefit the rural population of India.

◉ Only strong policy interventions can help in the attainment of the constitutional goal of planning and implementing economic development and social justice in India through which Gandhiji's dream of Gram Swaraj can be realised.

Practice Questions

1. What are the salient features of Mission Antyodaya? Assess the key outcomes of the mission since its launch.

2. Focusing on infrastructural development in rural area can foster economic development and aid in poverty alleviation. Discuss

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A SPLINTERED 'NERVE CENTRE' (THE CASE OF URBAN GOVERNANCE)

CONTEXT:

According to a recent update, Integrated Command and Control Centers, an integral component of the Smart Cities Mission, have been established in 80 cities, while the remaining 20 would be completed by August 15 this year.

What are the Integrated Command and Control Centres (ICCCs)?

- The Smart Cities Mission includes setting up ICCCs for each such city as a vital step. These ICCCs are designed to enable authorities to monitor the status of various amenities in real time.

- The ICCC acts as **nerve centre** for operations management of a **Smart City.**

- It processes a complex and large pool of data sets at an aggregated level and uses it to provide solutions to **municipal problems** faced by India's cities.

- Various amenities provided to the residents of Smart Cities can be monitored using the ICCC by the authorities.

- Projects under the ICCCs have been executed with the view of applying selected Smart Solutions to the existing city-wide infrastructure.

- **Controlling criminal activities:** The ICCC is also linked to **Crime and Criminal Tracking Networks and Systems (CCTNS)** which would help in controlling and preventing the occurrence of criminal activities in the vicinity of urban India.

- **Smart Services:** The ICCC is the **nodal point** of availability of all online data and information relating to smart services included in a smart city, such as like LED street lighting, CCTV surveillance cameras, air quality sensors, smart parking system, WiFi, electricity and water supply and billing, GIS, e-hospitals, property tax management, estate management, engineering systems, asset management systems, and other services.

- During the pandemic, ICCC also operated as COVID-19 management centres.

- These ICCCs are spread across various states that have been developing Smart Cities, with states such as Tamil Nadu, Uttar Pradesh, Madhya Pradesh and Gujarat leading in terms of the total number of ICCCs set up.

What is Smart Cities Mission?

- **Launched:** June 25, 2015

- Smart Cities Mission is an urban renewal and retrofitting programme launched by the Government of India to develop smart cities and make them citizen friendly and sustainable.

- The **Union Ministry of Urban Development** is responsible for implementing the mission in collaboration with state governments; this is expected to complete between 2019 and 2023.

- Key focus areas of the scheme include construction of walkways, pedestrian crossings, cycling tracks, efficient waste-management systems, integrated traffic management and assessment

What are the pillars on which ICCC is based?

- ICCC is based on five pillars and following are the same:
  - Bandwidth
  - The sensors and edge devices which record and generate real-time data
  - Various analytics which are software that draw on data captured by end devices to generate "intelligence"
  - Data storage
  - The ICCC software which as described by Ministry of housing and urban affairs as, "a system of systems" — the anchor for all other application specific components and has been described as the "brain and nervous system" of the city.

How will ICCC help in improvement of city administration?

- **Corrective measures:** It identifies certain data and analyses it for the administration that can then take the corrective steps.

- **Effectivity:** It enhances safety and security, improves efficiency of municipal services and promotes better quality of life for residents.

- **Better understanding**: ICCC uses its data to understand trends and patterns and forecasts

an event or incident for the citizens and the government.

- **Support system:** It acts as a support engine to emergency response system by providing an interface to coordinate among multiple departments such as the police, traffic police, fire, ambulance, hospital etc., in case of an emergency. This provides alerts and predict issues enabling timely decision and action support.

- **Continuous monitoring:** A unique feature of the solution is real time data visualisation, which helps in the continuous monitoring of various critical parameters across the city.

- **Better ideas:** Central to the promise of ICCC is the idea of 'predictive modelling' which uses data to generate inputs on just how the city is but also how it can be.
  - ➤ It could predict future real estate hot spots and could predict all accident prone spots in the city. It could also predict the bus routes prone to crowding.

Does the existence of ICCC interfere with the functions of Urban Local Bodies?

- The ICCC project is being executed under the aegis of the **Special Purpose Vehicles (SPVs)** constituted under the **Companies Act, 2013**, in the selected cities. Projects of the SPV that overlap with core ULB areas have been a source of tension between the two, one that the cities are still learning to resolve.

- Unless the core staff of ULB working across departments such as health, town planning, water supply, etc., adopt the ICCC systems, it risks being

a splintered "nerve centre".

- There is the risk of permanent underutilisation of the system. With poor integration with ULB services, and not just software integration but also in terms of workflows and SOPs, the functional capability may continue to be titled towards video surveillance.

- The sizeable investments required create contradictions in some cities which are otherwise struggling for funds to upgrade their basic infrastructure and services. One of the key questions to gauge the success of ICCC in future, maybe to ask, if cities are choosing to build and sustain these systems out of their own revenue or untied devolution funds. If not, ICCCs may struggle to outlive the exhaustion of mission grants.

- Despite the efforts to keep procurement vendor-agnostic, some segments of ICCC are still dominated by select industry players who may dictate terms to the city or engage in arm-twisting for payments.

Practice Questions

1. In the context of Smart Cities Mission, what are Integrated Command and Control Centres (ICCCs)? Critically examine their role as a nerve centre for the management of the cities?

2. Smart Cities are envisaged as the incubators of the New Urban India. In context of this statement, evaluate the outcomes of Smart cities mission. Also, suggest what more needs to be done to transform India's urban scenario.

****

APPOINTMENTS OF VICE-CHANCELLOR: NEW ARENA OF TURF WAR BETWEEN CENTRE AND STATES

CONTEXT:

In order to limit the Governor's power, two Bills passed by the Tamil Nadu State Assembly that seek to transfer the Governor's power in appointing Vice-Chancellors of 13 state universities to the state government.

The Tamil Nadu Universities Laws (Amendment) Act, 2022

The Chennai University (Amendment) Act, 2022

What are the Salient Features of the two Bills?

- The Bills passed in Tamil Nadu Legislative Assembly categorically states that "every appointment of the Vice-Chancellor shall be made by the State Government from out of a panel of three names" recommended by a search-cum-selection committee.

- At this point of time, the Governor has the power to pick a VC from the shortlisted names in his capacity as the Chancellor of state universities.

- The Bills said, according to the Acts in Gujarat, Telangana and Karnataka, the V-C shall be appointed by the Chancellor with the concurrence of the State government.

- The Bills also aims to empower the state government to have the final word on the removal of VCs, if such circumstances arise.

- Removal of a VC, if necessitated, can be done based on inquiries by a retired High Court judge or a bureaucrat who has served at least as a Chief Secretary, according to one of the Bills.

> **Amendment of which two Bills have led to Governor's power in appointment of VCs in State Universities being curtailed if given assent to?**
> - Chennai Universities Act, 1923
> - The Tamil Nadu Universities Laws (Amendment) Act, 2022

Have other states tried to constrain the role of Governor in the appointment of VCs?

- Recently the Maharashtra Assembly passed a Bill amending the Maharashtra Public Universities Act, 2016.

- Under the original Act, the Maharashtra government had no say in appointment of VCs.

- Under the proposed amendment however, the Governor **will be given two names to choose from** by the state government following recommendation made by a panel.

- The West Bengal government, three years ago, took away the Governor's authority in appointing VCs to state universities.

- The Odisha has also tried to bring appointments to state universities under its control. But the same has been challenged by the University Grants Commission (UGC).

Are there any states where the power of provincial government over-ride the authority of Governor in appointment of VCs?

- In Gujarat and Telangana, VCs to the state universities are appointed by the Governor in consultation with the State Government.

> - The Gujarat University Act, 1949 states that "the Vice-Chancellor shall be appointed by the State Government from amongst three persons recommended by a (search-cum-selection) committee".
> - The Telangana Universities Act, 1991 states that the search committee shall "submit a panel of three persons to the Government in alphabetical order and the Government shall appoint the Vice-Chancellor from out of the said panel".

- In Karnataka, Jharkhand and Rajasthan, state laws underline the need for concurrence between the state and the Governor.

What are the reasons for differences arising between various state governments and Governor's over the appointment of VCs?

- Politics lies beneath all the other reasons for difference in the matter of appointment of VCs

and other important functionaries in the state universities.

◉ State Governments, those ruled by parties other than the ruling party at the Centre, allege that the Governor, being an appointee of the Union Government, creates hindrance in the working of various aspects of state administration including appointment of VCs.

◉ It is also important to note that the regulations related to appointment of VCs differ from state to state and the same are open to multiple interpretations leading to disputes.

What is the stand of University Grants Commission on the question of appointments of VCs in State Universities?

◉ Education comes under Concurrent List of the Seventh Schedule of Indian Constitution, which means that both Centre and State Governments have a say with respect to it though the former enjoy upper hand.

◉ According to the UGC (Minimum Qualifications for Appointment of Teachers and other Academic Staff in Universities and Colleges and other Measures for the Maintenance of Standards in Higher Education) Regulations, 2018, the "Visitor/Chancellor" — mostly the Governor in states — shall appoint the VC out of the panel of names recommended by search-cum-selection committees.

◉ Higher educational institutions, particularly those that get UGC funds, are mandated to follow its regulations.

◉ These are usually followed without friction in the case of central universities, but are sometimes resisted by the states in the case of state universities.

What is the legal position according to the Supreme Court of India?

◉ The Supreme Court of India has stated that appointment of any person as a Vice Chancellor in contrary to the provisions of the UGC Regulations can be said to be in violation of the statutory provisions, and liable to be stuck down.

◉ According to the Apex Court in case of any contravention between the state legislation and Central Legislation (in this case UGC Act and regulations derived from this law), the later will prevail on application of the rule/principle of repugnancy as enunciated in Article 254 of the Constitution as the subject 'education' is in the Concurrent List of the Seventh Schedule of the Constitution.

Have there been any recommendation made by any expert panel of the matter of appointment of VCs in state universities?

◉ The **Punchhi Commission** on Centre-State relations had, while dealing with the subject of VC appointments, said "there would be a clash of functions and powers" if the authority to choose the top academician was wrested with the governor.

◉ This Commission had recommended that Governors should not be vested with powers that were not given to them by the Indian Constitution (which includes power to appoint VCs.

◉ This according to the Commission would give space for controversies and criticism and it would lead to clash of function between the state government and the governor.

What should be the way forward?

◉ Vice-Chancellor's position is of prime importance in India's University structure.

◉ He/she not only take care of the day-to-day working of the Universities but also provides a vision to the organisation based on which education and values and imparted on students who would be the citizen of tomorrow and mould the future of India.

◉ Appointment of such person therefore has to be done with due diligence after taking into consideration the academic credentials of the candidates and taking into consideration the views of all stakeholders including the Governor and state government.

◉ The realm of politics and controversy associated with it needs to be kept away from it.

◉ If need be a consultation committee may be appointed consisting of senior academician who can recommend the requite procedure that may be adopted so that appointed of VCs could henceforth be streamlined.

Practice Questions

1. It is moral obligation of the Governor to exercise her discretionary power with objectivity and impartiality. Analyse this statement in context of political tussle between the Governor and state government.

2. Discretionary power of Governor is wider than that of President. Comment.

NITI AAYOG, UNICEF INDIA SIGN STATEMENT OF INTENT ON SDGS WITH FOCUS ON CHILDREN

CONTEXT:

NITI Aayog and UNICEF India signed a Statement of Intent on the Sustainable Development Goals (SDGs) with a focus on children.

This seeks to formalize a framework of cooperation to launch the first report on the State of India's Children – Status and Trends in Multidimensional Child Development.

⊙ BACKGROUND

- This new initiative is built on the ethos of SDG attainments for children and ensuring that no child is left behind.

- The child-focused initiative builds on government's effort of monitoring progress through the **SDG India Index and Dashboard**, which continues to be a unique data-driven initiative for triggering policy action.

> **The definition of child**
>
> - **Article 1** of **the United Nations Convention on the Rights of the Child (UNCRC); Juvenile Justice Act 2000; Hindu Minority and Guardianship Act (HMGA) 1956; Protection of Women from Domestic Violence Act 2005** and so on define 'child' as **a person who is under 18 years of age.**
>
> - In the **Constitution of India and Child Labour (Prohibition and Regulation) Act 1986**, a 'child' is defined as a person below 14 years of age.
>
> - The recently amended **Juvenile Justice Act 2015** states that children (16-18 years) may be treated as adults if they commit heinous crimes such as rape, acid attack, murder, etc.

⊙ ANALYSIS

What is the actual state of children in India?

- **Lack of access to fundamental needs:** A high level of percentage of children are living in rural areas, often have limited access to fundamental needs such as nutrition, access to healthcare, education, and protection.

- **Gender discrimination**: Due to poverty, security or cultural factors, male children are educated while their female siblings do not get much attention.

- **Poverty** is considered as bane in childhood.

- **Child marriage** is still a reality in the country. Though it is considered as the gross violation of human rights in any civil society, it still happens

- **Child labour** is a social problem that affecting the enjoyment of childhood since time immemorial.

- **Trafficking:** The slavery persists in the modern society in the form of trafficking. Children are the worst victim of this social evil.

- **Climate Change:** The climate crisis-induced disasters are among the most relevant dangers to human survival. Children, in particular, are at the receiving end.

> - There are 472 million children in India under the age of 18 years, representing 39% of the country's total population.
>
> - A large percentage, 29% of that figure constitute children between the ages of 0 to 6 years.

What needs to be done?

- **Social protection:** Social protection is essential for preventing and reducing poverty for children and families, for addressing inequalities, and for realizing children's rights.

- **Child-sensitive social protection:** Child-sensitive social protection has the opportunity to address chronic poverty, social exclusion, and external shocks which can irreversibly affect children.

- **Addressing the needs of Children:** The government must work towards realisation of the following rights:

  ➤ Right to Health

  ➤ Right to Education

  ➤ Right to life

  ➤ Right to protection, and freedom of expression

  ➤ Right Identity

How would the collaboration between NITI Aayog and UNICEF India would help?

◉ UNICEF India and NITI Aayog are developing a **comprehensive measure** to understand the **multidimensional attainments and deprivations** among children across

  ➤ health and nutrition

  ➤ education

  ➤ water and sanitation

  ➤ household living standards

  ➤ protective environment

◉ It would help to analyse the status of children around critical child-related SDGs to establish recent trends.

◉ **Achieving 2030 Agenda:** This effort will contribute to the realisation of India's commitments to the **2030 Agenda** and provide a set of policy recommendations for concerted action in terms of accelerating progress towards the **SDGs to** **'leave no child behind'** and achieve their holistic development.

How would it be done?

◉ The collaboration between **NITI Aayog** and **UNICEF India** will draw up the methods, technical analysis, reporting and action planning for the first report on the **'State of India's Children'**.

◉ This project will undertake a whole-of-society approach involving all stakeholders ranging from Union Ministries, state government, academia, civil society organisations and child rights collectives.

Practice Questions

1. What are the main functions of the United Nations Children's Fund (UNICEF)? Throw light on various collaborations between India and UNICEF over the years.

2. Child labour is a necessary evil. Critically examine.

****

SC MOOTS DEEPER SCRUTINY BEFORE AWARD OF DEATH PENALTY

CONTEXT:

The Supreme Court asked Attorney General K.K. Venugopal for assistance to institutionalise a mechanism by which information crucial to decide whether a person should be condemned to death or not can be gathered and placed on record before trial judges.

This brief aims to look at the history of capital punishments in India and what are the crimes that call for death penalty in the country.

⊙ **ANALYSIS**

What is death penalty in India?

- Hanging and shooting are the two methods of death penalty in India.

- According to the **Criminal Procedure Code**, hanging is the method of execution in the **civilian court system.**

- The **Army Act, 1950**, however, lists both hanging and shooting as official methods of execution in the **military court-martial system.**

- Under the provisions of criminal procedure, death penalty must be awarded as an alternative punishment to life imprisonment which the offenders may be sentenced in 'rarest of rare cases'.

> **Rarest of rare cases**
>
> Rarest of rare cases can be described as those when the murder is committed in an extremely brutal, ridiculous, diabolical, revolting, or reprehensible manner so as to awaken intense and extreme indignation of the community. When total depravity and cruelty are the motives behind a murder.

Which crimes are punishable by death?

- Crimes punishable by death in India include
  - ➤ aggravated murder
  - ➤ other offences resulting in death
  - ➤ terrorism-related crimes resulting in death
  - ➤ terrorism-related cases not resulting in death
  - ➤ rape not resulting in death
  - ➤ kidnapping not resulting in death
  - ➤ drug trafficking not resulting in death
  - ➤ treason, espionage and military offenses not resulting in death

- Following the 2012 gang rape and murder, the Supreme Court amended the law in April 2013 to make it more stringent by adding new categories of offences regarding violence against women and minor girls.

> **Mercy petition process**
>
> - For a convict to file a mercy petition, his/her death sentence must be confirmed by a high court first.
>
> - The law says: "The death sentence convict has an option to appeal to the Supreme Court. If the Supreme Court either refuses to hear the appeal or upholds the death sentence, then the convict or his relatives can submit a mercy petition to the President of India (Articles 72) or the Governor of the State (161)."
>
> - **Grounds to seek mercy appeal:** physical fitness, age, law was too harsh, or the convict is the sole breadwinner of the family.
>
> - According to **Article 72 of the Constitution**, the power to pardon — philosophy of which is "every civilised country recognises and provides for the pardoning power as an act of grace and humanity in course of law" — lies with the President.
>
>   - ➤ The Article also states that he/she can grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the convict.
>
>   - ➤ The mercy petition is reviewed by the Ministry of Home Affairs, which consults the state involved, before going to the President.

Arguments in favour and against death penalty

- **In Favour**
  - ➤ **Retribution** - One of the key principles of retribution is that people should get what they

deserve in proportion to the severity of their crime.

- This argument states that real justice requires people to suffer for their wrongdoing and to suffer in a way appropriate for the crime.

➤ **Deterrence** - By executing convicted murderers, would-be murderers can be deterred from killing people.

➤ **Closure**: It is often argued that the death penalty provides closure for victims' families.

- **Against**

➤ **Questionable:** The statistical evidence doesn't confirm that deterrence works.

- Some of those executed may not have been capable of being deterred because of mental illness or defect.

- Death has been prescribed in rape cases since 2013 (Sec. 376A of IPC), still, rapes continue to happen and in fact, the brutality of rapes has increased manifold.

➤ This compels one to think of the death penalty is an effective deterrent to crime.

➤ **The risk of executing the innocent persists.**

➤ **Morality:** It is seen as inhumane. Thus, the morality of the death penalty is debatable.

What are the issues in the current system?

A Supreme Court Bench led by Justice U.U. Lalit made the following observations:

◉ **Quick decision:** In some cases, trial courts sentence a person to death merely hours after conviction.

◉ **Little effort to unearth the issue:** Little effort is taken to unearth or understand the circumstances which led a person to commit the crime. In short, trial judges hardly know the people they are sending to the gallows.

◉ **Ignored individual's details:** No effort is ever made to dig deeper into a convict's childhood experiences, multi-generational history of physical and mental health issues, exposure to traumatic events and other familial, social and cultural factors crucial in order to undertake an individualised sentencing enquiry.

◉ **Mitigation expert:** The court said a "mitigation expert", a qualified professional with unhindered access to the convict's past, ought to be at the centre of this change in outlook.

◉ This **'one-size-fits-all' approach** while considering mitigating factors during sentencing should end. A more enlightened approach has to be evolved. The apex court's introspection may be a sign of the judiciary veering away from the death penalty.

Capital Punishment and international standards

◉ Capital punishment founds its place in international human right treaties as a facet of right to life as imbibed in **"International Covenant on Civil and Political Rights ('ICCPR')",** it was later discovered that implementation of capital punishment violates the norms of prohibition against cruel, inhuman, and degrading treatment and punishment and with enforcement of **second ICCPR** there had been an increasing trend towards the removal of capital punishment as a way of punishment.

Practice Questions

1. Capital punishment is retributive justice and its effectiveness in curbing crime is contested. In light of this statement, critically examine the need for continuance of capital punishment in India.

2. Over the decades, Supreme Court has expanded the scope of Right to Life and liberty. Explain with the help of various judgements.

****

SC UPHELD 'PAVEMENT DWELLERS' RIGHT

CONTEXT:

The North Delhi Municipal Corporation's bulldozers' show of strength against roadside stalls, and push carts in Delhi's Jahangirpuri have faced resistance from a Constitution Bench judgment of the Supreme Court which had upheld the right to livelihood of pavement dwellers

◉ BACKGROUND

- In North Delhi area, several concrete and temporary structures were demolished in the violence-hit Jahangirpuri during an anti-encroachment drive carried out by the **North Delhi Municipal Corporation.**

- However, the action has faced resistance from a **Constitution Bench** judgment of the Supreme Court which had upheld the **right to livelihood of pavement dwellers** who ply their trade on the footpaths out of sheer economic compulsions.

- **Bench:** a five-judge Bench led by then **Chief Justice of India Y.V. Chandrachud.**

Issues concerned with pavement dwellers

- The order for the eviction of the pavement is the infringement of their right to livelihood and in turn the encroachment over their right guaranteed under **article 21 of the Constitution.**

- The impugned action of the State Government is violative of the provisions contained in **Article 19(1) (3), 19(1) (g) and 21 of the Constitution.**

Key-points made by the apex court

The SC Bench made the following points:

- The pavement dwellers cannot be treated as trespassers, their eviction should not lead to **deprivation of their livelihoods.**

- **Right to Life:** They should not be subject to harassment adding that their right to livelihood was an integral part of the right to life under **Article 21 of the Constitution.**

- **Right to Shelter:** Right to shelter was a fundamental right under Article 21. It was a right recognised by international conventions and an integral part of the principles of natural justice.

- **Fair procedure:** Though the right to reside and settle in any part of India under Article 19 (1) (e) cannot be read to confer the licence to encroach and trespass upon public property, the eviction of pavement dwellers and traders should be in accordance with the procedure established by law.

  - This "procedure" should be "fair, just and reasonable".

Right to Property

- The 'right to property' is a fundamental human right in a welfare state.

- It cannot be taken over by the State without following the proper procedure and seeking legal permission.

- Also, a welfare state cannot accept the plea of adverse possession, which permits a trespasser, i.e. someone who has committed a tort or felony, to obtain legal title to someone else's property for more than 12 years.

- With the **44th Constitution Amendment in 1978**, property ceased to be a fundamental right.

- Nonetheless, **Article 300 A** has allowed the State to deprive a person of his or her private property in accordance with legal procedure and authority.

- But there are strict laws around the issue.

- The State cannot be allowed to perfect its claim to the land by invoking the theory of adverse possession to seize the property of its inhabitants.

As stated in Article 31 of the Constitution, the right to the private property remains a basic right.

- The right to life includes the protection of one's means of subsistence; obligations to provide natural justice prior to eviction, but no automatic right to resettlement under Indian law.

Olga Tellis case

- The **Olga Tellis vs Bombay Municipal Corporation judgment** in 1985 ruled that eviction of pavement dwellers using unreasonable force, without giving them a chance to explain is **unconstitutional.**

- It is a violation of their **right to livelihood.**

- The case started in 1981 when the **State of Maharashtra** and the **Bombay Municipal Corporation** decided that pavement and slum dwellers in Bombay city should be evicted and "deported to their respective places of origin or places outside the city of Bombay."

- The court had emphatically objected to authorities treating pavement dwellers as mere trespassers.

- They (pavement dwellers) manage to find a habitat in places which are mostly filthy or marshy, out of sheer helplessness.

- It is not as if they have a free choice to exercise as to whether to commit an encroachment and if so, where.

What were the questions discussed before the Supreme Court?

- **Right to livelihood:** Whether eviction of a pavement dweller would amount to depriving him/her of their livelihood guaranteed under Article 21 of the Constitution.

  ➤ The Article mandates that "no person shall be deprived of his life or personal liberty except according to procedure established by law."

- **To label 'trespassers' or not:** The Supreme Court also decided to examine the question whether it was constitutionally impermissible to characterise pavement dwellers as trespassers.

Understanding the broader concept

Pavement dwellers include people living on the pavement, under the bridge, flyover, bus stop, near the railway station, in parks or under the open sky in any public place in the metros and urban areas where public facilities like public toilet are provided.

- **In search for better economic opportunities:** The people migrate from small villages looking for employment opportunities as there are not enough employment opportunities in their village or small towns.

- People are homeless due to financial problem, natural calamities, lack of employment opportunities.

- Secondly, Social reason. The pavement dwellers are considered to be the poorest of the poor. They live in kucha house made of plastic, polythene, cardboard, straws, bamboos etc. They try to settle themselves near the place they work.

- **Pradhan Mantri Awas Yojana (Urban) (PMAY-U)** – It was launched in June 2015 with the objective of providing affordable housing to all the urban poor.

Important Constitutional Provisions

Fundamental Rights under the Constitution of India which guarantees the protection of the right to adequate housing

- **Article 21:** Right to protection of life and personal liberty.

- **Article 14 and Article 19:** The apex court has included Article 14, 19 and 21 and recognized them as a deciding factor for a dignity of an individual.

  ➤ The states are under an obligation to protect the dignity of an individual by securing a household for the homeless.

Along with the above provisions, Constitution also provides for the following safeguards to homeless people

- **Article 39 (1):** State policy to be directed in order to secure for both men and women, equal right to an adequate means of livelihood.

- **Article 42:** Provisions to be made by the State for securing just and humane conditions of work and for maternity relief.

- **Article 47:** Duty of the State to raise the level of nutrition and the standard of living and to improve public health.

Practice Questions

1. Even after 75 years of independence and plethora of schemes, poverty alleviation remains a major challenge in India. Discuss.

2. Empowering women can contribute immensely to poverty alleviation. Elucidate.

****

MINISTRY, UNDP SIGN PACT ON SDGS

CONTEXT:

The Union Ministry of Panchayati Raj (MoPR) and the United Nations Development Programme (UNDP) have signed an agreement to collaborate in the areas of knowledge sharing and strengthening monitoring mechanisms for the localisation of the sustainable development goals.

◉ BACKGROUND

- The 2030 Agenda for Sustainable Development, was adopted by all United Nations Member States in 2015, which provides a shared blueprint for peace and prosperity for people and the planet.
- There are 17 Sustainable Development Goals which are an urgent call for action by all countries in a global partnership.

#	Brief description
1	End poverty in all its forms everywhere.
2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
3	Ensure healthy lives and promote well-being for all at all ages.
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5	Achieve gender equality and empower all women and girls.
6	Ensure availability and sustainable management of water and sanitation for all.
7	Ensure access to affordable, reliable, sustainable and modern energy for all.
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
10.	Reduce inequality within and among countries.
11	Make cities and human settlements inclusive, safe, resilient and sustainable.
12	Ensure sustainable consumption and production patterns.
13	Take urgent action to combat climate change and its impacts.
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
16	Promote peaceful and inclusive societies for sustainable development, provide institutions at all levels.
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Latest report on SDG

- India has slipped three spots from last year's 117 to rank 120 on the **17 Sustainable Development Goals** adopted as a part of the 2030 agenda by 192 United Nations member states in 2015.
- With the latest rankings, India is now behind all south Asian nations except Pakistan, which stands at 129.
- The south Asian countries ahead of India are Bhutan ranked 75, Sri Lanka 87, Nepal 96 and Bangladesh 109.

◉ ANALYSIS

What is in the Agreement?

- According to the agreement, the MoPR and the UNDP will collaborate in the areas of knowledge sharing, capacity building and strengthening monitoring mechanisms.
- **Objective:** Localisation of the sustainable development goals.

India's Population — 1.34[1] Billion

Rural Population — 0.93[2] Billion

GDP 2019-20 (at Constant price) — INR 203.39[2] Lakh Crore

Rural National Income — INR 100.5[2] Lakh Crore

Rural GDP — INR 101.69[2] Lakh Crore

AtmaNirbhar Bharat
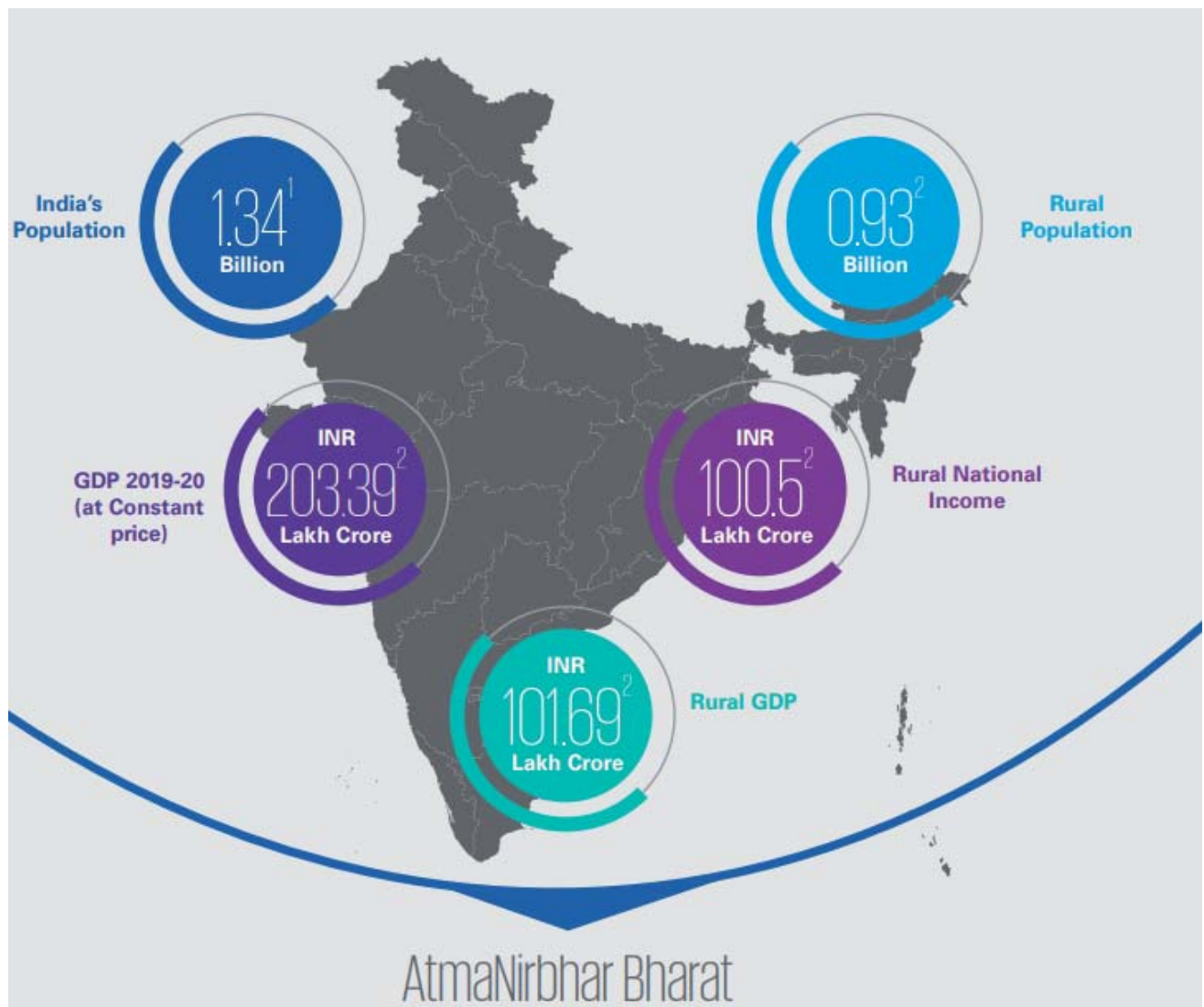
- The Ministry of Panchayati Raj would work towards strengthening the monitoring of SDGs at the grassroots.
- The MoPR-UNDP partnership will help in keeping local priorities on top of the agenda while planning and implementing programmes.

Why is the role of PRI important in achieving SDGs?

- **Critical component in delivering service:** The panchayati raj institutions (PRIs) have been a critical component of local self-governance across rural India, contributing in:
    - achieving last-mile connectivity
    - execution of various schemes of different departments and ministries
- **Covering the maximum population:** About 65 per cent of India's population lives in rural areas and the Centre is increasingly routing the funding of social sector schemes in sectors such as

sanitation, housing, solid waste management etc. through the rural local bodies.

- Active involvement of PIRs would be very beneficial in achieving SDGs.

What is the status of 'rural India'?

Rural development

- The Rural development generally refers to the process of improving the quality of life and economic welfare of people living in relatively isolated and sparsely populated areas.

- India's maximum population (65%) lives in rural India. However, the majority of rural areas are crippled with many problems that are acting as barriers to the development of rural areas.
- **Agricultural issues:** The Indian rural faces the tough conditions of drought and famine which impact the life of people because are uneducated and they depend on agriculture.

- **Poverty:** The rural people are facing the problems of undulation and poverty.

- **Lack of skills (required in modern world)**: The people are unemployed because they lack the skills to take up opportunities in life.

- If the rural sector is educated and advanced, it is easier to do business and the development is high. The economic development and the rural society have a kind of relationship which is generally interlocked because the issues of the external environment impact the values of economic development. It is necessary for the government to move in the direction and rhythm with the society because their sustainability is dependent on the long term benefits derived from the economic, social and environmental issues connected to rural basics.

Practice Questions

1. MSMEs are engines of our economy to achieve sustainable development. Do you agree? Substantiate your answer.

2. Explain the significance of access to affordable and clean energy for India's economic growth.

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GOVERNING NIDHI COMPANIES

CONTEXT:

The Ministry of Corporate Affairs (MCA) has amended rules governing Nidhi companies.

The Public Companies desiring to function as 'Nidhis' now must obtain prior declaration from the central government before accepting any deposits.

⊙ BACKGROUND

- In order to make regulatory regime for Nidhi Companies more effective and also to accomplish the objectives of transparency & investor friendliness in the corporate environment of the country, the Central Government has amended the provisions related to Nidhi under the **Companies Act and the Rules.**

- Nidhi companies existed even prior to the existence of companies act 2013. The basic concept of nidhi is **"Principle of Mutuality".**

- These companies are more popular **in South India**, and 80% of them are located in **Tamil Nadu.**

⊙ ABOUT NIDHI COMPANY

- Nidhi Company is a type of Non-Banking Financial Company (NBFC) recognized under **section 406 of the Companies Act, 2013.**

- Nidhis are also included in the definition of **Non-Banking Financial companies** which operate mainly in the unorganized money market.

- However, since 1997, NBFCs have been brought increasingly under the **regulatory ambit of RBI.**

RBI And Nidhi

- Since Nidhis come under one class of NBFCs, RBI is empowered to issue directions to them in matters relating to their deposit acceptance activities.

- However, in recognition of the fact that these Nidhis deal with their shareholder-members only, RBI has exempted the notified Nidhis from the core provisions of the RBI Act and other directions applicable to NBFCs.

> **Principle of mutuality and Nidhis**
>
> - The principle of mutuality postulates that "all the contributors to the common fund must be entitled to participate in the surplus and that all the participators in the surplus are contributors to the common fund".
>
> - Nidhis are formed to borrow and lend money to its members. It inculcates the habit of saving among its members and works on the principle of mutual benefit.

Existing rules

- **Governing laws:**
  - Nidhi companies are governed by Nidhi Rules, 2014. They are incorporated in the nature of Public Limited Company and hence, they have to comply with two set of norms, one of Public limited company as per Companies Act, 2013 and another is for Nidhi rules, 2014.
  - **No RBI approval is necessary to register the company**, as RBI has specifically exempted this category of NBFC in India to comply its core provisions such as registration with RBI etc.
  - Every nidhi company must ensure within a period **of one year** from the commencement that it has **not less than 200 members.**

- **Process of Registration:**
  - An Application for Name Registration
  - **Fill Part B of SPICe+, MOA, AOA and AGILe** Form
  - Convert SPICe+ Form into PDF
  - Upload the Form on Ministry of Corporate Affairs.

- **Registration:**
  - Nidhi company registration is simple and less complex as compared to other types of finance companies like NBFC which require RBI license to start.
  - A Nidhi company can be started with an initial capital of **Rs.5 lakh** and requires at **least seven people** to start with (minimum 7 members).
  - Nidhi company registration also requires **three directors initially**.
  - **Every promoter or director** needs a copy of **PAN card, ID proof and address proof to apply for a Nidhi company in India.**

Amendments made in existing provisions

- The amended provisions of the **Companies Act (Section 406) and Nidhi rules** requires that the Nidhi companies have to apply to the Central government for updation of their status/declaration as Nidhi Company in **Form NDH-4.**

- **Registration**: To become a Nidhi company, the entity has to first register as a public limited company, which has more disclosure requirements than a private limited company.

- **Declaration**: a public company set up as a Nidhi with share capital of 1 million needs to first get itself declared as a Nidhi from the Union government.

- **Membership:** This can be done by submitting an application showing a minimum membership of 200 and net owned funds of 2 million within 120 days of its incorporation.

- The promoters and directors of the company have to meet the criteria of fit and proper person as laid down in the rules.

- **Concept of deemed approval**: That is, if no decision on the application is conveyed to the company within 45 days of filing the application, approval would be deemed as granted.

- **No Loan to companies**: Only individual members are allowed in Nidhi companies and it cannot give loans to companies.

Benefits

- **Very Easy formation:** Nidhi company registration is very simple and the level of complexity as compared to other types of finance companies like NBFC is minimal in Nidhi Company.

- **Cost Efficient Registration:** Registering Nidhi Company comes with the pocket-friendly cost. The minimum capital requirement for registration of Nidhi Company is Rs 5,00,000 lakh which you can invest within 2 months after getting your Nidhi Company registered.

- **No RBI Regulations – less compliance:** RBI has exempted Nidhi Company from following stringent compliances.

- **More Certainty in Nidhi company:** In India, everyone likes to do the savings for six years old child to sixty years old man. And, the main objective of Nidhi company is to promote the habit of saving amongst its member which means it is certain and going concern business as the members will not stop savings anytime.

- **Less level of Risk - Non- payment loans:** It is the safest route for lending loan and the loans given to members are at very low rates in comparisons with other providers which again bring greater savings amongst members.

- **Net owned fund- Invest one get twenty:** Net owned fund means the amount of capital invested by owner in its business for raising funds. The net owned fund ratio of Nidhi Company is 1:20, which

means you invest one rupee and raise the deposit of twenty rupees.

Challenges in India

- **Member specificity**: As discussed above, Nidhi Companies can accept deposit and lend the money only to its members and shareholders.

  ➤ No outsider can deposit money in a Nidhi Company which limits the number of funds raised by the Company. Since, Nidhi Companies don't accept deposits from the outsiders other than its members and shareholders, the amount received by them from their members if less limits the ability of the Company to lend money to its members.

  ➤ And if the lending capacity of a Nidhi Company is limited, it thrashes the whole objective of the formation of the Nidhi Company.

- **No advertisement**: Unlike other financial institutions, Nidhi Companies are restricted from advertising their depositing schemes. Nidhi Companies are allowed to advertise among its members only.

- **Single ownership**: Nidhi Companies are restricted from running any other business other than lending and borrowing on its name.

- **Time boundness**: A Nidhi Company is not allowed to carry on its deposit schemes any more than a period of 5 years.

◉ CONCLUSION

Nidhi Companies along with certain limitations associated with it, it can be concluded that Benefits offered by Nidhi Companies surely overpowers its flaws. In recent times Nidhi Companies have been trending in the financial markets for the variety of benefits they provide. The capital required for incorporating a Nidhi Company is quite affordable even for the middle earning people. Moreover, the registration process of a Nidhi Company is fairly easy and requires less documentation as compared to other financial institutions.

Practice Questions

1. To realize the goal of $5 trillion economy, India needs to resolve the issues faced by its NBFC. Discuss.

2. Critically examine the role of asset reconstruction companies in tackling the problem of bad loans in Indian banking sector.

INDIA POST PAYMENTS BANK LAUNCHES 'FINCLUVATION'

CONTEXT:

India Post Payments Bank (IPPB) launched 'Fincluvation'– a joint initiative to collaborate with Fintech Startup community to co-create and innovate solutions for financial inclusion.

The initative is part of the 75th anniversary of Indian Independence and ongoing 'Azadi ka Amrit Mahotasav'.

Key highlights

◉ Fincluvation is an **Industry based first initiative** to create a powerful platform to mobilize the start-up community towards building meaningful **financial products aimed at financial inclusion**.

◉ Combination of IPPB's banking stack (DoP's trustworthy doorstep service network) and the techno-functional acumen of start-ups can deliver unmatched value to the citizens of the country.

◉ **Fincluvation will be a permanent platform** of IPPB to co-create inclusive financial solutions with participating start-ups.

◉ IPPB and DoP collectively serve close to **430 million customers** through neighbourhood post office and at their doorsteps via more than 400,000 trusted and capable Post Office employees and **Gramin Dak Sevaks -** making it one of the largest and trusted postal networks in the world.

◉ **Fincluvation invites startups** to Participate, Ideate, Develop and Market intuitive and tailored products and services that can be taken to the customers.

◉ **Startups are encouraged to develop solutions aligned with any of the following tracks-**

  ▶ **Creditization** - Develop Innovative & Inclusive credit products aligned with the use cases of target customers and take them to their doorsteps through Postal network.

  ▶ **Digitization -** Bring convenience through convergence of traditional services with Digital Payment Technologies such as making the traditional Money Order service as Interoperable Banking service.

  ▶ **Any Market-led solutions** that can help solve any other problem relevant to IPPB and/or DoP in serving the target customers.

Indian Post Payments Bank

◉ India Post Payments Bank, abbreviated as IPPB, is a division of Indian Post which is under the ownership of the Department of Post, a department under Ministry of Communications of the Government of India.

◉ On 19 August 2015, the India Post received licence to run a payments bank from the Reserve Bank of India. On 17 August 2016, it was registered as a public limited government company for setting up a payments bank. IPPB is operating with the Department of Posts under Ministry of Communications.

◉ Opened in 2018, the bank had acquired about 4 crore customers by December 2020.

◉ PPB aims to utilize all of India's **155,015 post offices** as access points and **3 lakh postal** postmen and **Grameen Dak Sewaks** to provide doorstep banking services.

The bank also provides features like:

◉ Account: The bank offers savings and current accounts up to a balance of ₹2 Lakh.

◉ **QR Card:** Customers can use QR code payments eliminating the need to remember account numbers, PINs and passwords.

◉ Unified Payments Interface

◉ Immediate Payment Service

◉ National Electronic Funds Transfer

◉ Real-time gross settlement

◉ Bharat BillPay

◉ Direct Benefit Transfer

◉ RuPay Debit Card

◉ AEPS (Adhaar Enabled Payment Service)

Benefits of the initiative

◉ It will allow the start-ups to work with IPPB and DoP experts to develop solutions and conduct pilots using the postal network and IPPB's technology stack.

  ▶ Successful pilots can then mature into long-term partnerships.

◉ Through **Fincluvation,** we can create a platform that can provide an opportunity for start-ups to work together with us in understanding the needs of the underserved customers to deliver products with a positive impact and more importantly in a cost effective manner.

◉ Intersection of technology with financial services coupled with traditional distribution networks is opening up new set of business opportunities.

- ➤ Conventional model of technology procurement led product creation by banks often lacks value in user experience leaving huge gap between customer expectations and service delivery.

Need in India

◉ **Traditional technology** firms fail to meet the expectations and a deficit of ownership in product creation has been observed.

- ➤ Our citizens have varied and complex needs that need careful thought, empathetic product design, and rapid prototyping among users.

◉ With Fincluvation, we can crowd-in the best minds to develop technology-led financial solutions for India.

◉ **Creditisation**- helps in developing innovative and inclusive credit products aligned with the use cases of target customers and taking them to their doorsteps through the postal network.

◉ **Digitisation- w**ill bring convenience through the convergence of **traditional services with digital payment technologies** such as making the traditional money order service as interoperable banking service.

◉ CONCLUSION

The initiative will bring the convergence of traditional and technology together to make the post payments and banking easier for common man. India needs such an initiative for inclusive development and financial inclusion in the society. It will not only provide aid to people but will boost the economy as well. The process of ensuring access to appropriate financial products and services needed by individuals and businesses including vulnerable groups such as weaker sections and low-income groups at an affordable cost in a fair and transparent manner by mainstream institutional players should be the only purpose for the government while making such policies.

Practice Questions

1. With its wide presence, India Post Payments Bank can help democratize banking services. Critically examine.

2. Elaborate on the role of microfinance institutions in financial inclusion and inclusive development

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THE SPECIAL PURPOSE ACQUISITION COMPANIES (SPACS)

CONTEXT:

The government is now considering a regulatory framework for special purpose acquisition companies (SPACs) to lay the ground for the possible listing of Indian companies.

Listing of Indian companies through this route has been advised by the company law committee to boost the ease of doing business in India.

⊙ BACKGROUND

- SPACs have emerged since 1990s but surged in popularity only in the last few years.

- In 2020, SPAC IPOs raised more capital than traditional IPOs for the first time.

- In 2021, the SPACs rally gained further momentum and the capital raised in the first quarter itself surpassed the total of 2020.

  - However, there has been a slowdown in the SPAC IPOs since then.

- In 2020, 247 SPACs were created with $80 billion invested, and in 2021, there were a record 613 SPAC IPOs. By comparison, only 59 SPACs came to market in 2019.

- The main methods by which a private company can become a public company are; the traditional Initial Public Offering (IPO) method, the direct listing method, or the method of merger with **a Special Purpose Acquisition Company (SPAC).**

SPACs in India

- While SPAC deals in India are still at a nascent stage, the number of SPAC related conversations in the Indian transactions space is swiftly growing.

- **Some of the examples are:**

  - **Grofers** has taking advantages from SPACs platform

  - A renewable energy company **ReNew power** has merged with the RMG Acquisition Corp II, a SPAC company.

What are Special purpose Acquisition companies?

- A **special purpose acquisition company (SPAC)** is a company that has no commercial operations and is formed strictly to raise capital through an initial public offering (IPO) or the purpose of acquiring or merging with an existing company.

- Also known as **"blank check companies,"** SPACs have been around for decades, but their popularity has soared in recent years.

- **Objectives of SPACs**-

  - A **special purpose acquisition company (SPAC)** is formed to raise money through an initial public offering (IPO) to buy another company.

  - At the time of their IPOs, SPACs have no existing business operations or even stated targets for acquisition.

  - Investors in SPACs can range from well-known private equity funds and celebrities to the general public.

  - SPACs have two years to complete an acquisition or they must return their funds to investors.

Initial Public Offering

- IPO is the selling of securities to the public in the primary market.

- Primary market deals with new securities being issued for the first time. It is also known as the new issues market.

- It is different from the Secondary market where existing securities are bought and sold. It is also known as the stock market or stock exchange.

- It is when an unlisted company makes either a fresh issue of securities or an offer for sale of its existing securities or both for the first time to the public.

- Unlisted companies are companies that are not listed on the stock exchange.

How a Special Purpose Acquisition Company (SPAC) Works

- SPACs are generally formed by investors or sponsors with expertise in a particular industry or business sector, to pursue deals in that area.

- In creating a SPAC, the founders sometimes have at least one acquisition target in mind.

- This is why they are called "blank check companies." IPO investors typically have no idea about the company in which they will ultimately be investing.

- ➤ SPACs seek underwriters and institutional investors before offering shares to the public.

- ➤ The funds SPACs raise in an IPO are placed in an interest-bearing trust account. These funds cannot be disbursed except to complete an acquisition or to return the money to investors if the SPAC is liquidated.

- ◉ A SPAC generally has two years to complete a deal or face liquidation. In some cases, some of the interest earned from the trust can serve as the SPAC's working capital. After an acquisition, a SPAC is usually listed on one of the major stock exchanges.
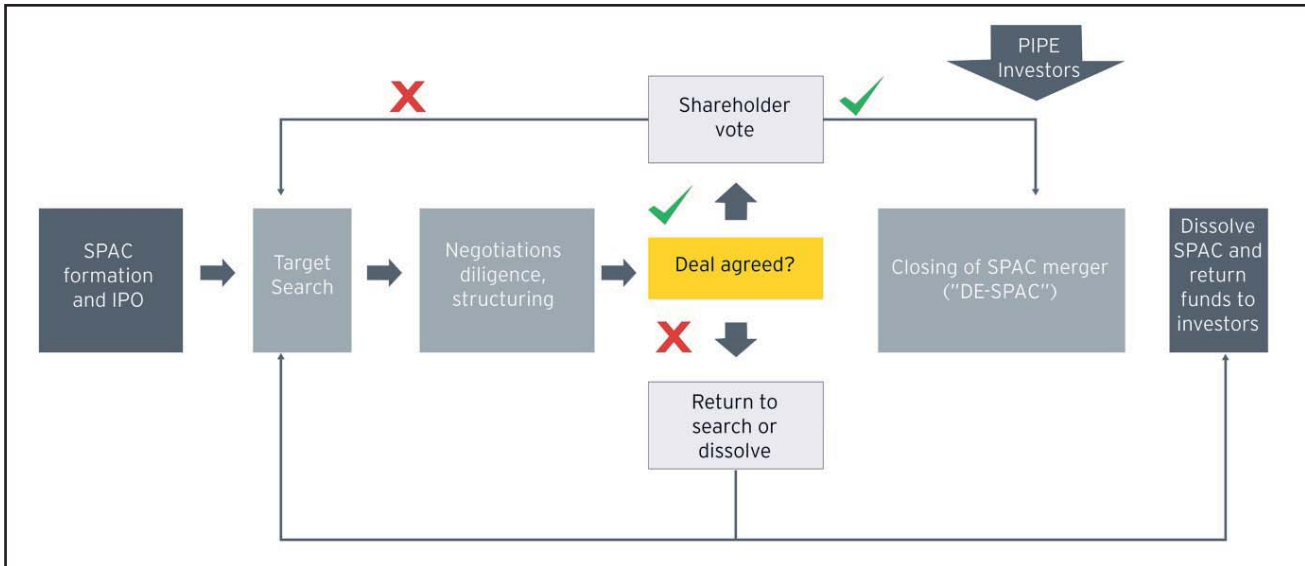
Advantages of a SPAC

- ◉ **Less tedious** -SPACs offer some significant advantages for companies that have been planning to become publicly listed.

  - ➤ Firstly, a company can go public through the SPAC route in a matter of months, while the conventional IPO process is an arduous process that can take anywhere from six months to more than a year.

- ◉ **Less Un-certainity**-The soaring popularity of SPACs in 2020 may partly be due to their shorter time frame for going public, as many companies chose to forego conventional IPOs because of the market volatility and uncertainty triggered by the global pandemic.

- ◉ **Easy to exit**-The owners of the target company may be able to negotiate a premium price when selling to a SPAC because the latter has a limited time window for making a deal. In addition, being acquired by or merging with a SPAC that is sponsored by prominent financiers and business executives can give the target company experienced management and enhanced market visibility.

The India's stand

- ◉ India currently does not have a specified SPAC regime in place.

- ◉ The International Financial Services Centres Authority (IFSCA), being the regulatory authority for development and regulation of financial products, financial services and financial institutions in the Gujarat International Finance Tec-City (GIFT City).

  - ➤ The proposed scheme defines critical parameters such as offer size to public, compulsory sponsor holding, minimum application size, minimum subscription of the offer size, etc.

- ◉ According to data sourced from SPAC, a portal that maintains a record of SPAC deals, of the 755 IPOs has diverted to SPAC routes.

  - ➤ The gross proceeds raised by SPACs in 2020 amounted to over $83 billion, while for 2021 the number stands at $91.65 billion as of now.

- ◉ According to a report, venture **capital firms Elevation Capital and Think Investments** are expected to launch a SPAC focused on **Indian technology companies** seeking to list in America.

- ◉ Furthermore, while India has not taken an official regulatory stand on allowing the listing of SPACs here, the **Security and Exchanges Board of India (SEBI)** has reportedly formed a group of experts to study the feasibility of bringing SPACs under the regulatory ambit.

  - ➤ However, the Indian regulatory framework does not allow the creation of these blank cheque companies as yet.

➤ For example, the **Companies Act 2013** stipulates that the **Registrar of Companies can strike off a company if it does not commence operations within a year of incorporation**.

> ### What were the Recommendations of the Company Law Committee 2022?
>
> ● It recommends introducing an enabling framework to recognise SPACs under the Companies Act, 2013 and allow entrepreneurs to list a SPAC incorporated in India on domestic and global exchanges.
>
> ● In order to align SPACs with the existing scheme of the Act, the Committee has also recommended that an exit option should be provided to shareholders that do not agree with the choice of the target company.
>
> ● Further, it also underscores the need to suitably modify provisions relating to striking off companies in their application to SPACs, since they do not have any operating business of their own.

Risks associated

◉ **Risk of investor fradulant**- An investor in a SPAC IPO is making a leap of faith that its promoters will be successful in acquiring or merging with a suitable target company in the future.

➤ The reduced degree of oversight from regulators, coupled with a lack of disclosure from the typical SPAC, means that retail investors run the risk of being saddled with an investment that could be massively overhyped or occasionally even fraudulent.

◉ **Low returns**- Returns from SPACs may be well below expectations when the initial hype has worn off in the market.

◉ **SPACs vs IPOs**- As many as 70% of SPACs that had their IPO in 2021 were trading below their $10 offer price as in 2021, according to a Renaissance Capital strategist.

➤ This dismal performance could mean that the SPAC bubble that some market experts had warned about may be in the process of bursting.

◉ **Increased regulations**-Towards the end of 2021 and early 2022, it is evident that SPACs have lost some of their luster due to increased regulatory oversight and less than stellar performance.

➤ And the purpose of its establishment with independent mergers will not be fulfilled.

Way Forward

◎ **India Should Reap the Benefits of SPACs:**

➤ For India, it is to tread SPACs with cautious optimism and greater regulatory oversight, given that instances of underwhelming performances by SPACs have slowly begun to surface.

➤ In order to strengthen the regulatory framework governing them and mitigate accompanying risks, it is necessary to extend statutory recognition to such companies and employ sophisticated safeguards to protect the interests of investors.

◎ **SPACs should also be allowed for Global Exchanges**:

➤ It is essential that SPACs incorporated in India should be allowed to list not only on domestic stock exchanges, but also on global exchanges, to enable target companies to ride the SPACs wave and achieve their fullest possible potential.

◎ **Need to Analyse the Issues Related to SPACs:**

➤ While recognising SPACs within the contours of the Companies Act is a welcome step, it may still require a more sophisticated analysis of SPAC-related issues based on prevailing market practices, in consultation with Securities and Exchange Board of India (SEBI).

➤ Additionally, the foreign listing of Indian incorporated SPACs can only be achieved after the commencement of **Section 23(3) and Section 23(4) of the Companies Act,** which enables certain classes of companies to list their securities on stock exchanges in permissible foreign jurisdictions.

> ### Practice Questions
>
> 1. Why Special Purpose Acquisition Company (SPAC) is called a blank-cheque company? Comment on its growing relevance in India.
>
> 2. Amidst the unicorn revolution in India, there is a need for right policy support and regulatory direction to ensure start-ups reach their potential. Examine.

****

COVI-19 SURGE PREPAREDNESS WITH AI, GENOMIC SURVEILLANCE

CONTEXT:

The novel coronavirus disease (COVID-19) crisis has significantly redefined the humanitarian emergency paradigm and changed the understanding of disaster management in several ways.

⊙ BACKGROUND

- New and emerging variants of **SARS-CoV-2 virus** continue to pose a threat to the health of populations across the globe.

- Counting the unique and observable changes in the sequences available until January 2022 shows more than 6,000 mutations have accumulated in the spike gene of the virus.

- Initial studies claimed SARS-CoV-2 to be a fast-mutating virus which may make the virus fitter over time.

- More recent studies have estimated moderate substitution rates of the whole genome at 0.00067 and the spike gene at 0.00081 substitutions per site per year, respectively.

- A preprint claimed that the fitness of the SARS-CoV-2 virus is increasing because of the natural phenomenon of purifying selection of the spike protein.

⊙ ANALYSIS

How management of COVID is difficult than other disasters?

- **Not limited to a geography**: The crisis is not limited by a geographic area or a cluster or physically defined areas in which the disaster occurred — as in an earthquake, flood or cyclone.

- **Unimaginable transmission:** Effects of the disaster are so microscopic and invisible that one can easily underestimate its virulence or potency, as it happened in the early days of the pandemic.

  ► Earlier epidemics like **SARS (Severe Acute Respiratory Syndrome)** and those due to bird flu and Ebola had a relatively lower geographical influence, but the speed of transmission and virulence of COVID-19 has posed an entirely new challenge.

- **Threatened globalization:** To mitigate the impacts of COVID-19, the process of globalisation, travel and access was strictly restricted.

The changing nature of disasters

- **Increasing unpredictability:** With the nature of disasters changing constantly, they can surprise humanity by their unpredictability and speed of onset, despite access to the most advanced and sophisticated **information and early warning systems.**

  ► In recent disasters, the inability to predict the incidence of mudslides or the amount of water to be held or released in dams during heavy rains — whether in Mumbai, Kerala or Chennai in recent years.

  ► The ferocity of volcanic discharges recently in the Philippines and New Zealand surprised many scientists and earthquakes continue to surprise us with their relative unpredictability.

  ► The ability of disaster management authorities to reasonably predict or anticipate would be put to test in the days to come.

- **Inability to anticipate impact:** One of the issues that came to the forefront in the COVID-19 crisis in India was the seeming inability of governments to anticipate the impact of the suddenness of the lockdown on migrant labourers in various parts of the country.

How to manage disasters in future?

- **Quick response:** The speed of response would need to be gauged not only how quickly we enforced physical distancing and lockdowns, but also in the speed and reach of preventive messaging.

- **Quick procurement:** The speed of response is often linked to the ability to procure materials in a timely and cost-effective manner in every disaster.

  ► Notable among the countries that responded quickly have been Taiwan and Hong Kong which could therefore contain the infection levels quickly.

- **Smart response:** There is also an urgent need to be "smart" in responses.

- **Strategic and tactical responses:** The government should not lose sight of our strategic and tactical responses while implementing steps to mitigate the crisis.

- **Good Governance:** Good governance, responsive administration and active coordination should be non-negotiable features of a dynamic process that is driven by transparency and accountability on the part of public officials.

Where utilisation of genomic can help?

- There is crucial need to use genomic features to predict surges of cases.

- Consortia and open-data initiatives across the globe, such as the Indian **SARS-CoV-2 Genomics Consortium (INSACOG)** and **GISAID** have been instrumental for identification of new variants.

- However, most of the inferences from genomic surveillance have so far been retrospective in nature — explaining the past rather than predictive of the future.

AI & Disaster Management

- AI or Artificial Intelligence mimics human intelligence and processes by computer systems procedures.

- AI has the potential to speed up our understanding of natural hazards, analysing large volumes of data (and images) from different sources and improve proactive rather than reactive actions for disaster risk reduction (DRR).

- It can improve readiness and lessen the human and infrastructure costs of major events when they do occur.

- AI and machine learning can help public safety officials refine strategies over time, getting smarter about planning and response.

- AI can be used to analyze event data for patterns, identify current at-risk areas and populations, and model future needs, based on population growth, development, and climate change, among other variables.

- Government leaders can use these insights to craft policies that reduce the impact of disasters on communities, like planning new buildings in less vulnerable areas.

Way Forward

Effective learnings from the covid-19 hopefully would result in a lot more of preventive disaster management plans and strategies being implemented across the country in the future —

- flood-proofing areas prone to annual flooding

- creating infrastructure for community disaster response plans

- drought-proofing arid areas by implementing ever-greening strategies combining

  - decentralised, community-based water management

  - appropriate agriculture choices

  - agro-forestry with active encouragement by local, central and state governments

Practice Questions

1. Artificial Intelligence has demonstrated great potential in combating biological disasters such as COVID-19. Comment.

2. Virus genome sequencing and surveillance are vital tools in tackling biological disasters. Discuss.

****

EXPERT BODY NEEDED ON MAN-ANIMAL CONFLICT: HOUSE PANEL

CONTEXT:

Parliament has proposed to amend the existing Wildlife (Protection) Act of 1972. The proposed amendment has not taken Human-Animal Conflict into the recommendation.

⦿ BACKGROUND:

- Around the world, human-wildlife conflict (HWC) challenges people and wildlife, leading to a decrease in people's tolerance for conservation efforts and contributing to multiple factors that drive species to extinction

- HWC is a significant threat to conservation, livelihoods, and myriad other concerns and should be addressed at a scale equal to its importance.

- By allocating adequate resources and forming wide-ranging partnerships, we can move towards long-term coexistence that benefits both people and wildlife.

- The new Amendment Bill has not taken the Human-Animal Conflict into the consideration.

- The standing committee on Science, Technology, Environment and Climate Change has submitted a report it recommends the Ministry of Environment set up an expert body to tackle the Human-Animal Conflict instances.

Analysis:

What are the suggestions made by the committee?

- **Standing committee of the State Board of Wildlife (SBWL)**
  - ➤ The new bill provides provision to create a Standing committee of the State Board of Wildlife (SBWL) to make the functioning of SBWL more purposive and target-oriented.
  - ➤ **Composition:**
    - 1/3rd of non-official members of the SBWL
    - 3 institutional Members
    - Director of Wild Life Institute of India
  - ➤ Standing Committee can take the powers of the State Board for Wildlife (SBWL) and take decisions independently.

Human-Animal Conflict (HAC) Advisory Council

- Committee has recommended setting up HAC Advisory Body to tackle the growing instances of Human-Animal Conflict.

- HAC Advisory Committee will be chaired by Chief Wildlife Warden.

- The Advisory Committee has the power to make site-specific plans and mitigation measures, which may include changing cropping patterns and critical decisions at short notice.

Data on human-elephant conflict

- In India, data from the Union Ministry of Environment, Forest and Climate Change indicates that over 500 elephants were killed between 2014-2015 and 2018-2019, mostly due to human-elephant conflict.

- During the same period, 2,361 people were killed as a result of conflict with elephants.

What are the major driving factors for Human-Animal Conflict?

- HWC results from a variety of ecological and anthropogenic drivers that exert pressures on landscapes where humans and wildlife share space

- Ecological drivers include seasonal changes, natural calamities, and animals' life cycles, as well as the movement patterns of animals

- Anthropogenic drivers, such as habitat loss, changes in land use, livestock management, expansion of agricultural practices, climate change, resource extraction, infrastructure development, and urbanisation.

- Each negative impact emerges from a complex web of interactions between drivers, making it extremely difficult, if not impossible, to view the effect of one driver in isolation

- For instance, if forests are cleared for settlements or agriculture, or roads are cut into previously inaccessible areas, habitat loss and fragmentation

result, forcing wildlife and people into closer proximity to each other.

◉ Fulfilling the target Sustainable Development goals:

➤ **No Poverty** - HWC affects the income of farmers, herders, artisanal fishers, and Indigenous peoples, particularly those living in poverty and without resilience

➤ **Zero Hunger** - Wildlife damages food stores, crops, and livestock and puts subsistence farmers at risk of hunger

➤ **Good Health & Well Being** - HWC impacts people's health – both directly, when attacks lead to injury, and more indirectly, for example, when malaria rates increase as a result of farmers' need to protect their crops through the night

➤ **Quality Education** - Children are often responsible for time-consuming crop and livestock guarding, which decreases school attendance and lowers education standards for pupils in HWC-impacted areas, creating potentially lifelong inequalities

➤ **Gender Equality** - Women carry the highest burden of HWC due to their role in society and culturally defined tasks and responsibilities; for example, not only are they vulnerable to attack by wildlife while collecting natural resources but also, if they are widows, they may suffer high losses because it is culturally unacceptable for them to guard at night

➤ **Clean Water & Sanitation** - In arid parts of the world, water access may be reduced and risky for people as they compete with wildlife for water sources

➤ **Decent Work & Economic Growth** - HWC can drive the vicious circle of poverty and low livelihood diversity, resulting in the unavailability of occupational work in HWC hotspots

➤ **Industry, Innovation & Infrastructure** - HWC can increase as a result of linear infrastructure development that fails to consider the migratory routes and spatial distribution of wildlife, resulting in vehicle collisions with wildlife or displacement of wildlife

➤ **Reduced Inequalities** - HWC drives inequality of cost and benefit distribution if those who pay the price for living with wildlife do not receive the benefits of coexistence

➤ **Sustainable Cities & Communities** - Facing shrinking natural habitats, wildlife increasingly utilises green spaces in urban areas and pursues non-traditional food sources, which leads to urban HWC, such as the human-leopard conflict in the city of Mumbai

➤ **Climate Action** - Climate change alters habitats and drives human and wildlife behaviour changes, bringing humans and wildlife into closer proximity to each other, which can lead to HWC

➤ **Life Below Water** - Marine HWC negatively impacts the survival of many marine species, including sharks, whales, sea turtles, seals, and polar bears

➤ **Life On Land** - The survival of multiple terrestrial species, particularly apex predators and megaherbivores, depends on successful HWC management and coexistence

➤ **Peace, Justice & Strong Institutions** - Carnivores and megaherbivores create immediate safety concerns. Also, HWC can lead to demoralising conflicts between groups of people and result in inequities and societal destabilisation

➤ **Partnership For Goals** - Human-wildlife coexistence and sustainable development both require integrated decision making, participation, and good governance at international, national, and regional levels, plus the involvement of civil society.

What steps can be taken to manage and reduce the Human-Animal Conflict?

◉ **Understanding the conflict:** Researching all aspects of the conflict profile to understand the context for conflict in any given situation (hotspot mapping, community attitudes, spatial and temporal characteristics, etc.)

◉ **Mitigation:** Reducing the impacts of HWC after it occurs (compensation, insurance, alternative livelihoods, etc.)

◉ **Response:** Addressing an ongoing HWC incident (response teams, reporting mechanisms, standard operating procedures, etc.)

◉ **Prevention:** Stopping or preventing HWC before it occurs (fences, early detection tools, safe working environments, etc.)

◉ **Policy:** Enabling HWC management through protocols, principles, provisions, and measures stipulated in the legislation and undertaken by authorities (international and national law, national and local HWC management plans, spatial plans, etc.)

◉ **Monitoring:** Measuring the performance and effectiveness of HWC management interventions over time (data collection, information sharing, adaptive management, etc.)

⦿ **CONCLUSION:**

The means to prevent and reduce HWC have changed relatively little over time, but the socio-cultural, economic, and physical geographies of landscapes where conflict plays out have been radically transformed by ever-growing human enterprises. Considering where we are in the wider landscape of moving towards human-wildlife coexistence, the global community can come together and collaborate to implement and scale-up integrated and holistic approaches to HWC management, and if new policies can strike an appropriate balance between mechanisms that deter negative human behaviour towards wildlife and those that promote and enable tolerance, then humans and wildlife may be able to share space more harmoniously for a long time to come.

Practice Questions

1. According to WWF and UNEP report, Human-wildlife conflict is among the greatest threats to animal species. Examine the causes behind rising cases of human-wildlife conflict. Suggest possible measure to tackle this growing problem.

2. Desertification is turning land to dust. In context of this statement, bring out the causes of desertification in India. Also, discuss the importance of the United Nations Convention to Combat Desertification.

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WILDLIFE PROTECTION (AMENDMENT) ACT

CONTEXT:

Parliament has proposed an amendment to the Wildlife (Protection) Act, 1972.

⊙ BACKGROUND:

- The geographic location and latitudinal position of India has gifted India with a diverse wildlife species.

- India with 6 biodiversity hotspot possesses several numbers of species of plants and animals. In order to conserve and protect these species of biodiversity India needs a speculative and strong legislative backing.

- Wildlife (Protect) Act, 1972 provides a legal backing for protection of the wildlife species and to the commitments made by India to the Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (CITES).

- Rationalization of scheduled species of plants and animals were long overdue.

- The new bill proposes for 50 Amendments to the existing act of 1972.

- Despite several sequential amendments wildlife species are still facing survival threat in India.

⊙ ANALYSIS:

Origin of the act:

- To protect the biodiversity of India, Government of India has passed a act Wildlife (Protection) Act in the year 1972.

- Wildlife (Protection) Act, 1972 has several Provisions:
  - ➤ Schedule 1: Endangered species immune from all king of trading and poaching with extreme protection
  - ➤ Schedule 2: Species with lesser protection and prohibition of trade.
  - ➤ Schedule 3 and 4: Non – Endangered species
  - ➤ Schedule 5: Plants species
  - ➤ Schedule 6: Vermin Species

What changes does the amendment propose?

The Bill seeks to increase the species protected under the law, and implement the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Key features of the Bill include:

- Rationalizing the schedules:
  - ➤ Reduced the number of schedules for specially protected animals to two
  - ➤ Removed the scheduled for vermin species.
  - ➤ New schedule for specimens listed in the appendices of CITES

- Obligations under cites: Bill provides for creation of two independent authorities
  - ➤ Management Authority: To grant license for trading purpose
  - ➤ Scientific Authority: To give advice on aspects related to impact on the survival of the specimen being traded.

- Regulation on invasive species: Bill empowers the central government to regulate the import and trade of invasive alien species.

- Control of Sanctuaries: Empower the government to regulate the business of Chief Wildlife Warden in line with the regulatory guidelines made by central government.

- Voluntary Surrender of Specimen: Any one surrendering any captive animal to the Chief Wildlife Warden, the person will not be compensated and the specimen of the captive animal will be considered as states property.

- Penalties: Penalties on violation of the rules has been revised and increased under this bill.

What are major benefits of the proposed amendment?

- **Decentralization:** The Bill aims to decentralise wildlife protection, with the establishment of Standing Committees of State Boards of Wildlife, which can regulate permissions to various projects based on their impact on the wildlife, without having to refer to the **National Board for Wildlife.**

- The bill also aims to streamline the schedules mentioned in the original Act, shrinking them from six to four.

- Additionally, Wildlife Management Plans crafted for wildlife sanctuaries and parks in the country will be brought under the jurisdiction of the Act, thereby increasing the scope for stricter protection for various species. These were earlier governed by the government in charge.

- **Increased penalty for wildlife crimes:** The Bill increases penalties for wildlife crimes.

  ➤ **For example**, offences that attracted a fine of Rs 25,000 now attract Rs 1 lakh.

- **CITES:** There's a new and separate chapter on regulating species involved in international trade according to the **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)** Specifically, the Bill prohibits possessing, trading and breeding species without prior permissions from CITES authorities.

  ➤ India became party to CITES in 1976.

- **Invasive alien species**: The Bill also recognises threats that invasive alien species pose.

  ➤ These species aren't native to the country; when they're introduced to an ecosystem that hasn't evolved to deal with this life-form, they can quickly degrade it to their advantage.

    • An infamous example is the weed called **mesquite**.

What are limitations and drawbacks of the amendment?

- **Effect on elephant population:** The bill allows for commercial trade in elephants which is problematic because it effectively gives legal sanctity to commercial trade in live elephants.

- Wild Asian elephants are taken from forests, often illegally, to maintain the high demand for captive elephants. This could affect wild populations of elephants.

- **More power to centre:** Another amendment in the bill has given excessive delegation and unrestricted power to the Central government to declare a species as

- Once a wild animal is declared as vermin, it enjoys no legal protection and has the same status as

a domestic animal. It can be killed, traded, and tamed.

- **Permission for film shoot: Section-28 (b)** has been amended to grant permission for film-making without causing any adverse impact to habitat/wildlife.

- Film shooting was banned in **1978 to avoid accidents and tragedies.**

- The bill also lacks to encourage the importance of including research and habitats in the Preamble and creating enabling provisions.

- Minimizing the list of Animals: reshuffling of schedules by the Amendment has reduced the list of species which were enlisted under Wildlife (protection) Act, 1972.

◉ CONCLUSION

There is a dire need for joint effort of Government furthermore, Stakeholders with NGOs for various projects worry to protection of biodiversity and natural life government assistance. Government ought to endorse enactment for illicit exercises that drives biodiversity to the edge of termination. There ought to be open mindfulness about wildlife conservation significance through social, print and electronic media.

Practice Questions

1. Despite stringent laws, illegal trade of wildlife is rampant in India. Discuss the reasons behind the same. What are the steps taken by Government for conservation and management of endangered species?

2. Briefly discuss the key provisions of the Wildlife Protection Amendment Bill, 2021? What is the significance of the amendment for wildlife conservation and protection?

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AGRO-FORESTRY & ITS SOCIO-ECONOMIC IMPACT

CONTEXT:

In order to aid carbon-neutral growth, India needs to stress working extensively toward agroforestry in the country.

⊙ BACKGROUND:

- Trees play an important role in ecosystem in all terrestrials and provide a range of products and services to rural and urban people.

- As natural vegetation is cut for agriculture and other types of development, the benefits that trees provide are best sustained by integrating trees into agricultural system.

- Cultivating trees in combination with crops and cattle is an ancient traditional practice across South-east Asia.

- Agroforestry in India was practiced from the ancient times which provides several raw materials like timber, wood and leaves for building house, fire and other engineering activities.

- Agro forestry also has the potential to increase the farmers' income.

⊙ ANALYSIS

What is agro forestry?

- Agroforestry is a low-cost integrated land management where trees are cultivated with cash crops.

- It is a process of interaction of agriculture and trees along with agricultural use of trees.

Classification of agro forestry:

- Agro forestry can be classified into four major divisions:
  - ➤ Structural
  - ➤ Functional
  - ➤ Socio economic
  - ➤ Ecological
- These 4 divisions can be sub divided into other categories
  - ➤ structural basis
    - • nature of components
- Agrisilvicultural systems (crops and trees including shrubs/vines and trees)
- Silvopastoral System (trees + pasture and/or animals)

- Agrosilvopastoral System (trees + crops+pasture/animals)
- Other Systems
  - ➤ Apiculture with Trees
  - ➤ Aqua-forestry
  - ➤ Multipurpose Wood Lots
    - • Arrangement of components
- spatial arrangements
- temporal arrangement
  - ➤ functional
    - • productive functions
- Food
- Fodder
- Fuelwood
- Other woods
- Other products
  - ➤ protective functions
- Wind-break
- Shelter-belt
- Soil conservation
- Moisture conservation
- Soil improvement
- Shade (for crop, animal and man)
  - ➤ socioeconomic
    - • commercial
    - • intermediate
    - • subsistence
  - ➤ ecological
    - • humid/sub-humid low lands
    - • arid/semi-arid lands
  - ➤ highlands

Types of agroforestry in Non-Forest areas:

- Farm forestry: A name given to a kind to forestry where farmers grow trees for commercial purpose on their own land.

- Extensive forestry: It is the practice of forestry in areas devoid of tree growth and other vegetation situated in places away from conventional forest areas. Extensive forestry has three of its own kind

➤ Mixed forestry: Practice of forestry for raising fodder grass with scattered fodder trees, fruit trees and fuel wood.

➤ Shelter belts: Belt of trees or shrubs maintained for the purpose of shelter from wind, sun, drift etc.

➤ Linear strip plantation: Plantation of fast growing species on linear strips of land.

◉ Rehabilitation of Degraded Forests: Forestry by the community on a degraded forest land to meet their socio economic needs.

◉ Recreation Forestry: Practice of forestry with the objective to develop or maintain a forest of high scenic value.

What is the main objectives for adopting agro forestry?

◉ Agroforestry is agricultural and forestry systems that try to balance various needs:

➤ To produce trees for timber and other commercial purpose.

➤ To produce a diverse and adequate supply of nutritious food for both domestic and global demand.

➤ To ensure protection of environment so that it continues to provide resources and environmental services.

What are main benefits of agro forestry?

◉ **Agro forestry ensure benefits on various fronts:**

➤ Bio-physical and environment

➤ Social benefits

➤ Economic benefits

◉ **Bio-Physical and environmental front: Agro forestry creates a significant positive impact on the environmental growth and sustainability. Various such benefits which impacts the environments are:**

➤ Increase soil fertility

➤ Reduce level of soil erosion

➤ Increased nutrient cycle

➤ Higher crop yield

➤ Induced favorable micro climate condition

➤ Watershed protection

➤ Carbon sink

◉ **Economic benefit: Agroforestry in farmlands or crop lands brings significant economic benefit in the agricultural sector, which includes:**

➤ Increment in an maintenance of outputs of food, fuelwood, fodder, fertilizer and timber

➤ Reduction in incidence of total crop failure, common to single-cropping or monoculture system

➤ Increase in levels of farm incomes due to improved and sustained productivity

◉ **Social benefits:** Agroforestry also plays a central role in development and growth of rural households and rural society, which are as follows:

➤ Improvement in rural living standards from sustained employment and higher incomes

➤ Improvement in nutrition and health due to increased quality and diversity of food outputs

➤ Stabilization and improvement of upland communities through elimination of the need to shift sites of farm activities

➤ Increasing farmers income and sustainable growth of rural economy is one of the major objective behind **Aatmanirbhar Bharat**

➤ Ensuring social security to the rural society specially to the youth and marginalized section becomes more challenging step for the government which can be secured by diversifying the income sources of the rural households

➤ Availability of nutritious food can also be enabled by the process of agro farming which may help to boost up the **Poshan Abhiyaan** by Government of India.

➤ **Aatmanirbhar Bharat Abhiyaan:** Making rural economy and households more sustainable and self-dependent the potential of agroforestry can be taken into account to meet the targets

➤ Sustainable development goals:

● **SDG 1:** No Poverty, which can be achieved in rural economy by the means of agroforestry.

● **SDG 10:** Reduce Inequality, increase in income of the farmers will reduce the income gap in the rural households and societal gap in the rural society.

➤ Reduction in Urban migration and Urban poor

Limitations of Agroforestry:

◉ Potential to have a competition between forest cover and food crops which may lead to less crop yield and can impact food security.

◉ Potential trees may act as shelter for many pests which are harmful for the crops.

◉ Rapid regeneration of trees may displace the food crop from a particular field.

- Labour intensive process.

- Lower crop yield may give rise to a income gap between small and marginal farmers and big farmers.

- Big farmers have a huge share in the profitability in agroforestry, whereas, small farmers could not afford to diversify the field for other purpose other than food crop as most of them are self-sufficient farmers.

What has government done to promote agroforestry?

- National Action Plan for Climate Change: Under NAPCC government of India has launched a sub scheme of Green India Mission where the agro forestry has been a primary focus to increase the farmers' income and increase the forest cover of India.

- Har Medh Par Ped: Scheme introduced by government to promote agroforestry

- Mission for Integrated Development of Horticulture

What can be done to promote agroforestry?

- Subsidizing or incentivizing the cost of inputs to the farmers.

- Issues related to income gap and decline in crop yield shall be secured by the government especially for the small and marginal farmers.

- Improving the quality of infrastructure growth for storage and transportation of forest products.

- Increasing the penetration of processing industries and corporate farming in the rural areas.

- Increasing the penetration of formal banking sector in the rural economy to protect the farmers and agro foresters from viscous cycle of debt.

- Introduction of insurance schemes for health income and crop yields.

⊙ CONCLUSION:

Agroforestry has the potential to improve the condition of the farmers' socio-economic structure as well as increase in green cover and reduce the impact of climate change by improving the environmental conditions. Aatmanirbhar Bharat scheme, Poshan Abhiyaan and Sustainable development goals can be achieved by the means of agro forestry. Eradication of poverty in any form can be achieved in the rural sector by doubling the farmers' income. Rise income of the farmers and rural households will make the rural economy more self-dependent and the stepping stone for Aatmanirbhar Bharat Abhiyaan will get a proper space to provide a wide base to the future developments.

Practice Questions

1. What do you understand by the term agroforestry? How can agroforestry help in increasing income of farmers?

2. "Climate change will affect lives and livelihoods of communities dependent directly on land, water, and forests. Agroforestry can help them tackle this challenge". Discuss.

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SECTION: B
(PRELIMS)

CURRENT AFFAIRS

THE BIOGRAPHY OF AZHVARS

◉ **CONTEXT:** The Azhwars, the Tamil poets were in discussion recently due to good reasons. It is believed that the Lord out of His Sankalpa revealed the Truth of His form and innumerable auspicious qualities to the Azhwars.

- **Their hymns are thus on a par with the scriptures when they sing of what they have intuitively grasped.**

Azhwars

- The Azhwars were Tamil poet saints of South India who lived between the **sixth and ninth centuries A.D.**

- They espoused 'emotional devotion' or bhakti to **Lord Narayana** in their songs of longing, ecstasy and service.

- **Counting numbers: Sri Vaishnava** orthodoxy posits the number of alvars as ten, though there are other references that include **Andal** and **madhurakavi**, making the number twelve.

- The devotional outpourings of Alvars, composed during the **early medieval period** of Tamil history, helped revive the **bhakti movement**, through their hymns of worship to Vishnu and his Avatars.

- They praised 108 of this deity's holy abodes in their hymns, known as the **Divya Desams.**

    ◉ The collection of their hymns is known as **Divya Prabandha.**

- The Bhakti literature that sprang from Alvars has contributed to the establishment and sustenance of a culture that broke away from the ritual-oriented Vedic religion and rooted itself in devotion as the only path for salvation.

- In addition they helped to make the Tamil religious life independent of knowledge of Sanskrit.

- As part of the legacy of the Alvars, five Vaishnava philosophical traditions (sampradayas) have developed at the later stages.

90TH ANNIVERSARY OF SIVAGIRI PILGRIMAGE AND GOLDEN JUBILEE OF BRAHMA VIDYALAYA

◉ **CONTEXT:** Prime Minister Narendra Modi addressed a programme to mark the 90th anniversary of the Sivagiri pilgrimage and the golden jubilee of the Brahma Vidhyalaya.

About Sivagiri pilgrimage:

- Sivagiri is the **holy abode of** one of the great saints and social reformers of India, **Sree Narayan Guru.**

- Established by Narayana Guru who propagated the message of **'One Caste, One Religion and One God for Mankind',** the Sivagiri Mutt is a major spiritual-cum-pilgrim centre of the backward **Ezhava community** in Kerala.

- **Subjects:** The pilgrimage focuses on eight subjects vis-a-vis education, cleanliness, piety, handicrafts, trade and commerce, agriculture, science and technology and organised endeavour.

- The pilgrimage **started with a handful of devotees in 1933** but now has become one of the major events of south India.

- Every year, lakhs of devotees from all over the world irrespective of caste, creed, religion and language visit Sivagiri to participate in the pilgrimage.

- Shri Narayan Guru had also **envisioned a place to teach the principles of all religions with equanimity and equal respect.**

- The **Brahma Vidhyalaya of Sivagiri** was set up to realise this vision.

  ◎ Brahma Vidhyalaya offers a course of seven years on Indian philosophy including the works of Shri Narayan Guru and scriptures of all important religions of the world.

Architecture and distinctive features of the temple:

- The **Sivagiri Sarada temple is octagonal in shape**.

- It was planned and designed by the Guru himself.

- The Sarada temple here has **windows**, which were very uncharacteristic of a temple.

- The Guru called it Sarada Mutt and he wanted to dedicate it to **Saraswathy, the Goddess of knowledge.**

  ◎ The goddess is **seated on a white lotus**, indicating the knowledge blossoming on purity.

- The rituals are also is different from that of other temples.

  ◎ While other temples perform nivedyam (offering of food to the deity) or abhishekam (pouring oil, ghee and such on the idol), Sharada temple is devoid of all such rituals.

  ◎ The **devotees are free to worship the goddess reciting hymns**.

  ◎ Guru, himself a writer and poet, wrote Janani-navaratna Manjari, in praise of the Goddess.

- Apart from consecrating a symbolic idol and shunning all tantric rituals, the Guru also insisted on keeping high hygiene standards on the temple premises.

  ◎ His followers adhere to the Guru's words now too and the temple is thus very different from other temples in the world.

About Shree Narayana Guru:

- He was born in 1856, in the village of Chempazhanthi near Thiruvananthapuram as the son of **Madan Asan, a farmer, and Kutti Amma.**

- He was born into an **Ezhava family**, in an era when people from backward communities faced **social injustice in the caste-ridden Kerala society**.

- He led the **Reform movement in Kerala, r**evolted against the caste system and worked on propagating new values of freedom in spirituality and **social equality which transformed Kerala society.**

- He became a **'Parivrajaka' (one who wanders from place to place in quest of** Truth) after the demise of the father and wife.

- He passed away in 1928.

Contribution in anti-caste revolution

- Narayana Guru consecrated the first temple of Lord Shiva in 1888 where an idol was ordinated by a **non-brahmin** in **Aruvippuram** village of Kerala.

- His step sparked off the anti-caste revolution against the upper-caste Brahmin communities.

- In 1903, he established the **Sree Narayana Dharma Paripalana Yogam (SNDP)** as the founder and president.

- The organization continues to mark its strong presence to this day.

Contribution to National Movement:

- He was in the forefront of the **movement for universal temple entry** and against the societal ills like the social discrimination of untouchables.

- He provided the **impetus for Vaikom agitation**, which was aimed at temple entry in Travancore for the lower castes.

- He captured the **essence of Indian-ness in his poems**, which highlighted the unity that lies beneath the world's apparent diversity.

Literary Works:

- He wrote various books in different languages. Few of them are:
  - Advaitha Deepika
  - Asrama
  - Thevarappathinkangal
  - Brahmavidya Panchakam etc.

Philosophy of SreeNarayana Guru:

- Sree Narayana Guru became one of the greatest proponents and re-evaluators of **Advaita Vedanta,** the principle of non-duality put forward by AdiShankara.

- In 1913, he **founded the Advaita Ashram** at Aluva. This was an important event in his spiritual quest.

- This Ashram was dedicated to a great principle – **Om SahodaryamSarvatra** (all men are equal in the eyes of God).

PRE-ERUPTION WARNING SIGNALS AT WHAKAARI WHITE ISLAND AND OTHER ACTIVE VOLCANOES

⊙ **CONTEXT:** Scientifically and emotively, we think every volcano has its own "personality". However, volcanoes share behaviour traits — and this could form the basis for an eruption warning system.

About Whakaari Island:

- Whakaari/White Island is currently **New Zealand's most active cone volcano**.

- It is located in **the Bay of Plenty** sitting 48 kilometres offshore.

- The cone has been built up by **continuous volcanic activity** over the past 150,000 years.

- The island covers an area of around 325 hectares and this is only about 30 per cent of the volcanos mass - the rest is under the sea.

- Even so, it is only about **half the size of other cone volcanoes like Mount Ruapehu, Tongariro or Taranaki.**

- It is a tourist magnet, with its alien landscape and spectacular hydrothermal features.
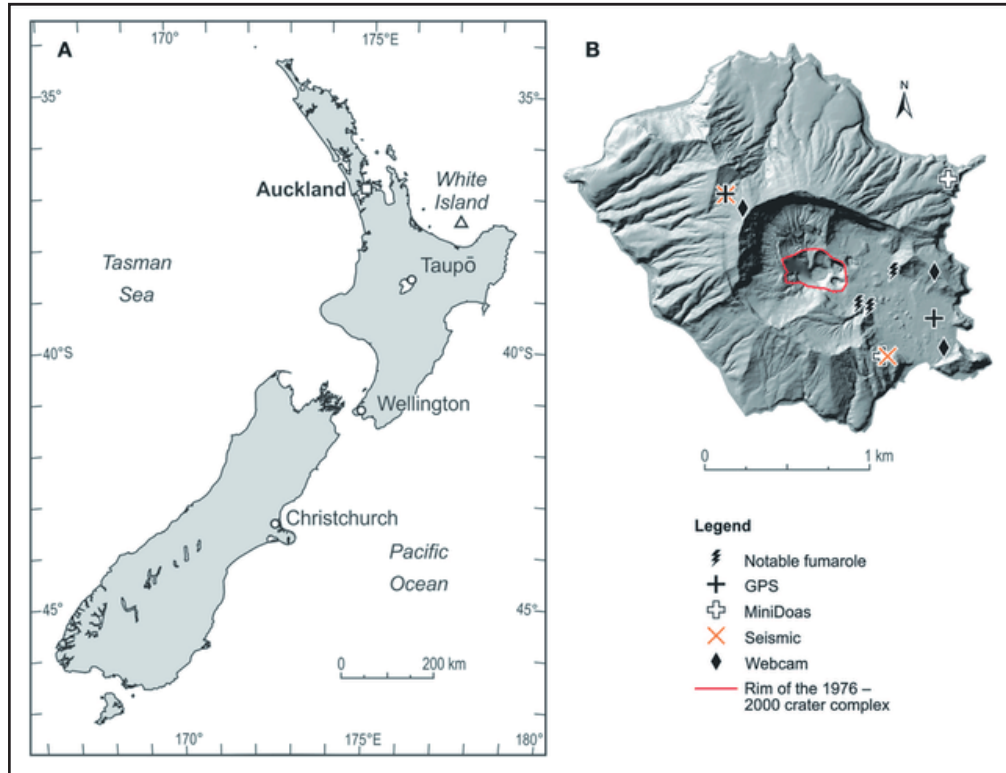
2019 Explosive Eruption

- A fatal explosive volcanic eruption occurred in December 2019.

- Tragically some visitors and guides on the island at the time were killed, and many injured.

- The eruption removed the Crater Lake, formed new vents and generated landslides into the active crater area.

Deciphering volcanic language

- Every volcano behaves differently: some have crater lakes while others are "dry", they have diverse magmas and rise to different elevations.

- Despite these differences, we think volcanoes such as Whakaari, Ruapehu and Tongariro in New Zealand could be driven to eruption by common processes in the shallow sub-surface below their craters.

- The new study noted that one pattern repeatedly in the days before all the known Whakaari eruptions over the past decade, and most Ruapehu and Tongariro ones.

- This pattern is a slow strengthening of a quantity called **Displacement Seismic Amplitude Ratio (DSAR)**, which peaks a few days before each event.

- DSAR is a **ratio that compares the "activity" of fluids (gas, hot water, steam) at the volcano's surface to those several hundred metres deep.**

- When DSAR increases, surface fluids are quiet, but deep ones are still actively moving and circulating vigorously below ground.

- This indicates a blockage or seal has formed, preventing gas escape. Like a pressure-cooker, if the gas can't escape a volcano, it explodes.

PM CONFERS PRIME MINISTER'S AWARDS FOR EXCELLENCE IN PUBLIC ADMINISTRATION

⊙ **CONTEXT:** **PM Modi conferred the Awards for Excellence in Public Administration 2021 for effective implementation of identified priority programmes to mark the 15th Civil Services Day.**

About:

- Every Year the Government of India observes **National Civil Services Day** on **April 21** as an occasion for the Civil Servants to rededicate themselves to the cause of citizens and to renew their commitments to public service and excellence in work.

- Prime Minister's Awards for Excellence in Public Administration were instituted with a view to recognize the extraordinary and innovative work that has been done by the Districts/implementing units and Central/State organisations for the welfare of common citizens.

- The prestigious awards are also conferred for an effective implementation of identified priority programmes and innovation.

- Exemplary work done in the following five identified priority programmes will be given awards which is to be presented on Civil Services Day 2022:
  - ⊚ Promoting "Jan Bhagidari" or People's Participation in **Poshan Abhiyan**
  - ⊚ Promoting excellence in sports and wellness through **Khelo India scheme**
  - ⊚ Digital payments and Good Governance in **PM SVANidhi Yojana**
  - ⊚ Holistic Development through **One District One Product scheme**
  - ⊚ Seamless, End-to-End Delivery of Services without Human Intervention.

A MISTAKEN DECISION (GOVERNMENT ORDER (GO) 111)

⊙ **CONTEXT:** **Environmentalists and activists are criticising the Telangana government for withdrawing an over 25-year-old government order protecting the historic Osman Sagar and Himayat Sagar reservoirs in Hyderabad.**

What is GO 111?

- The erstwhile Andhra Pradesh government issued this order restricting any kind of major construction and industrial activity in a 10-km radius of the full tank level of the two reservoirs — **Himayat Sagar and Osman Sagar.**

- These dams have been a key source of drinking water for the city for decades, and have also been an essential part of flood control, among other environmental factors.

- With an intention to protect the reservoirs, the GO created a buffer zone to avoid any kind of polluting activity in the catchment areas from industrial, commercial to heavy residential constructions in the lake area.

- GO 111 is applicable to 1.32 lakh acres of land in 84 villages, in mandals with proximity to Hyderabad, such as Shamshabad, Rajendranagar, Moinabad, Chevella, Shabad, etc.
  - ⊚ The 84 villages fall under the 10-km catchment area of Osman Sagar and Himayat Sagar.

- Development in residential zones is permitted but the order specifically **classifies land use of about 90 per cent of the area** for recreation and conservation.

- **About 60 per cent of the total area** shall be kept as open space and roads in all layouts in the villages of the catchment area

Osman Sagar and Himayat Sagar

- They were built in **1920 and 1927**, respectively, under the last **Nizam-era ruler Mir Osman Ali Khan**, after the devastating 1908 floods in Hyderabad that killed thousands.

- Legendary engineer **M. Visvesvaraya** was brought in to make the city flood-proof. Under his recommendation to control excess water during floods, these two massive storage reservoirs were built.

- The reservoirs eventually became a crucial source of drinking water as water from river **Musi and Esa** were stored in the storage units.

  ◎ Musi is also known as Moosa or Muchkunda and a major **tributary of the Krishna River.**

NIZAMSAGAR DAM
105 km

MANJIRA-SINGUR
Phases III and IV,
1991 and 1993, 80 km
from Hyderabad

MANJIRA
Phases I and II, 1965
and 1981, 58-59 km
from Hyderabad

OSMAN SAGAR
1920, 15 km from Hyderabad

Hussain Sagar

Hyderabad

Musi river

HIMAYAT SAGAR
1927, 9.6 km from Hyderabad

KRISHNA PHASE I
(Nagarjuna Sagar project)
2004-05, 116 km from Hyderabad, to bring 130 MLD by 2021

CAPACITIES AND SUPPLY

Source	Designed capacity (MLD)	Maximum supply (MLD)
Osman Sagar	115	40-68
Himayat Sagar	91	40-50
Manjira Phase I	68	68
Manjira Phase II	135	135
Manjira Phase III (Singur)	171	171
Manjira Phase IV	176	176
Krishna Phase I	410	261
Groundwater		115

CENTRE TO SOON INTRODUCE 'AYUSH VISA' FOR FOREIGN NATIONALS

⊙ **CONTEXT:**   The Centre would soon introduce a special Ayush visa category for foreign nationals who want to come to India to take advantage of traditional medicine, as part of initiatives to promote medical tourism.

What is the concept of AYUSH VISA?

- AYUSH Visa aims to help all those individuals who are looking to come to India for seeking **traditional treatments.**
- The AYUSH wellness centres would attract a lot of visitors from across the world thus boosting the country's economy.

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.

About AYUSH Mark

- To promote the **traditional medicine industry**, India will soon launch `AYUSH mark'` which will give authenticity to quality AYUSH products made in the country.
- After the introduction of the AYUSH mark, products will be thoroughly vetted using the latest technology to check and maintain its quality.
- ISO standards are being developed by the experts of AYUSH in association with the **Bureau of Indian Standards** with the objective of creating an export market across 150 countries in the world.

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.

Objective of the 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 rawmaterials 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.

CEASEFIRE WITH 3 NAGA GROUPS EXTENDED

⦿ **CONTEXT:**   **The Centre has extended ceasefire agreement with three Naga groups for further period of one year.**

Which are those three insurgent groups of Nagaland?

The ceasefire agreement is in operation between the Centre and the three insurgent groups of Nagaland namely:

- National Socialist Council of Nagaland-NK (NSCN/NK)

- National Socialist Council of Nagaland-Reformation (NSCN/R) and

- National Socialist Council of Nagaland-K-Khango (NSCN/K-Khango).

About Naga Ceasefire Agreements:

- The Naga groups include NSCN-NK, NSCN-R and NSCN-K-Khango.

- All these groups are breakaway factions of National Socialist Council of Nagaland (NSCN-IM) and National Socialist Council of Nagaland-Khaplang (NSCN-K).

- This agreement is a significant boost to the Naga peace process and in line with Prime Minister of India's vision of 'insurgency free, prosperous North East'.

- In September 2021, the Centre had entered into a one-year ceasefire agreement with the National Socialist Council of Nagaland (K) Niki Group.

- The Centre had earlier signed a "Framework Agreement" with the NSCN (IM) in August 2015.

THE NAGA STRUGGLE

1918: Naga Club formed. Seeds of Naga nationalism sown	Agreement interpreted as offer for sovereignty by NNC
1946: Naga National Council (NNC) born under the leadership of A.Z. Phizo	**1955:** NNC begins armed insurgency. Delhi imposes Assam Disturbed Areas' Act
August 14, 1947: NNC declares independence	**1958:** AFSPA comes into force
June 1947: Haidari	**1963:** Nagaland born
1964: Nagaland Peace Mission created, ceasefire signed	
1975: Shillong Accord signed, calls for unconditional ceasefire, termed a 'complete sellout'	
1980: National Socialist Council of Nagalim (NSCN) formed	
1988: NSCN splits into NSCN (K) and NSCN (I-M)	
1997: NSCN (I-M) signs ceasefire	
2001: NSCN (K) signs ceasefire	
March 2015: NSCN (K) breaks ceasefire	
August 2015: Naga peace accord signed	

A.Z. Phizo

INDIA'S DESIGNATION BY THE USCIRF

◉ **CONTEXT:**

In its 2022 Annual report, the United States Commission on International Religious Freedom (USCIRF) has recommended that India be designated a 'Country of Particular Concern' (CPC), i.e., the category of governments performing most poorly on religious freedom criteria.

About USCIRF:

- The USCIRF is an independent, bipartisan body created by the International Religious Freedom Act, 1998 (IRFA) with a mandate to monitor religious freedom violations globally and make policy recommendations to the President, the Secretary of State, and the Congress.

- It is a congressionally created entity and not an NGO or advocacy organisation.

- It is led by nine part-time commissioners appointed by the President and the leadership of both political parties in the House and the Senate.

- According to the IRFA, commissioners are "selected among distinguished individuals noted for their knowledge and experience in fields relevant to the issue of international religious freedom, including foreign affairs, direct experience abroad, human rights, and international law."

How does it work?

- In practice, the USCIRF has little teeth in implementation, but acts as a conscience-keeper for the two branches in the US government- the legislature and the executive.

- The USCIRF is mandated by US statute to "monitor the universal right to freedom of religion or belief abroad — not in the United States — using international standards to do so and makes policy recommendations to the President, Secretary of State, and Congress".

The USCIRF's main responsibilities:

- To issue an annual report by May 1 of each year, assessing the US government's implementation of IRFA.
  - ◉ It recommends countries that the Secretary of State should designate as **"Countries of Particular Concern"** for engaging in or tolerating **"systematic, ongoing, egregious violations of religious freedom".**

- To engage Congress by working with Congressional offices, advising on legislation, testifying at hearings, and holding briefings on religious freedom issues.

- To meet regularly with Executive Branch officials to share information, highlight situations of concern, and discuss USCIRF's recommendations for US policy.

What does a 'Country of Particular Concern' (CPC) designation mean?

- IRFA requires the USCIRF to annually identify countries that merit a CPC designation. As per IRFA, CPCs are countries whose governments either engage in or tolerate "particularly severe violations" of religious freedom, which are defined as "systematic, ongoing, egregious violations of the internationally recognized right to freedom of religion".

- The other designation, for less serious violations, is **Special Watch List (SWL)**

Which other countries have been designated as CPCs?

- For 2022, based on religious freedom conditions in 2021, a total of 15 countries have been recommended for the CPC designation.

- They include India, Pakistan, Burma, China, Eritrea, Iran, North Korea, Pakistan, Russia, Saudi Arabia, Tajikistan, Afghanistan, Nigeria, Syria and Vietnam.
- Countries recommended for a SWL designation include Algeria, Cuba, Nicaragua, Azerbaijan, Central African Republic, Egypt, Indonesia, Iraq, Kazakhstan, Malaysia, Turkey, and Uzbekistan.

RAISINA DIALOGUE 2022

⊙ **CONTEXT:**   **Prime Minister Narendra Modi inaugurated the seventh edition of the Raisina Dialogue in New Delhi recently.**

Raisina Dialogue:

- The Raisina Dialogue is an annual **conference on geopolitics and geoeconomics** addressing issues facing the **global community**.
  - ⊚ It takes its name from the Raisina Hill, the seat of the Indian government.
- It is organized by the **Ministry of External Affairs** in collaboration with the **Observer Research Foundation (ORF).**
- Since its inception, the Raisina Dialogue has emerged as a leading global conference on international affairs featuring the participation of heads of state, ministers, journalists, academics and researchers.
- **Theme of previous Dialogues:**
  - ⊚ 2016: "Asia: Regional and Global Connectivity"
  - ⊚ 2017: "The New Normal: Multilateralism with Multipolarity"
  - ⊚ 2018: "Managing Disruptive Transitions: Ideas, Institutions and Idioms"
  - ⊚ 2019: "New Geometrics, Fluid Partnerships, Uncertain Outcomes"
  - ⊚ 2020: "Navigating the Alpha Centurys"
  - ⊚ 2021: "Viral World: Outbreaks, Outliers and Out of Control"

The Raisina Dialogue 2022 and its theme

- The 2022 edition will have over 100 sessions with around 210 speakers from 90 countries and multilateral organisations.
- While the main event takes place **in New Delhi**, side events will be held in **Berlin** and **Washington**.
- A young fellows programme will also be organised on the sidelines of the event.
- The **theme** for the 2022 Edition is **"Terra Nova: Impassioned, Impatient, and imperilled".**
- Over the course of three days, the dialogue will feature panel discussions across multiple formats on **six thematic pillars**. These are:
  - ⊚ Rethinking democracy: Trade, Tech and Ideology
  - ⊚ End of Multilateralism: A Networked Global Order?
  - ⊚ Water Caucuses: Turbulent Tides in the Indo-Pacific
  - ⊚ Communities Inc: First Responders to Health, Development, and Planet
  - ⊚ Achieving Green Transitions: Common Imperative, Diverging Realities
  - ⊚ Samson vs Goliath: The Persistent and Relentless Tech Wars

Significance of Raisina Dialogue 2022:

- India is the second-largest country in the world in terms of population, and the significance of demographics can never be underestimating.

- No matter where there is conflict, India worries about evacuating its people. Therefore, India has to be the one country invested in global peace that will seek to avoid conflict

- The Raisina Dialogue 2022 will help in finding ways to move toward a global order that is inclusive and rules-based.

- The need for constructive conversations and encouraging diverse opinions along multiple tracks has never been more.

- In this discourse, we aim to map the evolving geopolitical and geoeconomic trend-lines, question prevalent dogmas about the international system, and encourage future-oriented thinking.

- The dialogue is a platform that brings together India's friends and partners seeking common ground.

THE QUARREL OVER KURIL ISLANDS

⊙ **CONTEXT:**

Russia has suspended talks with Japan over the Kuril Islands, which have been ongoing since WWII. Russia says the move was a response to Japanese sanctions over the invasion of Ukraine.
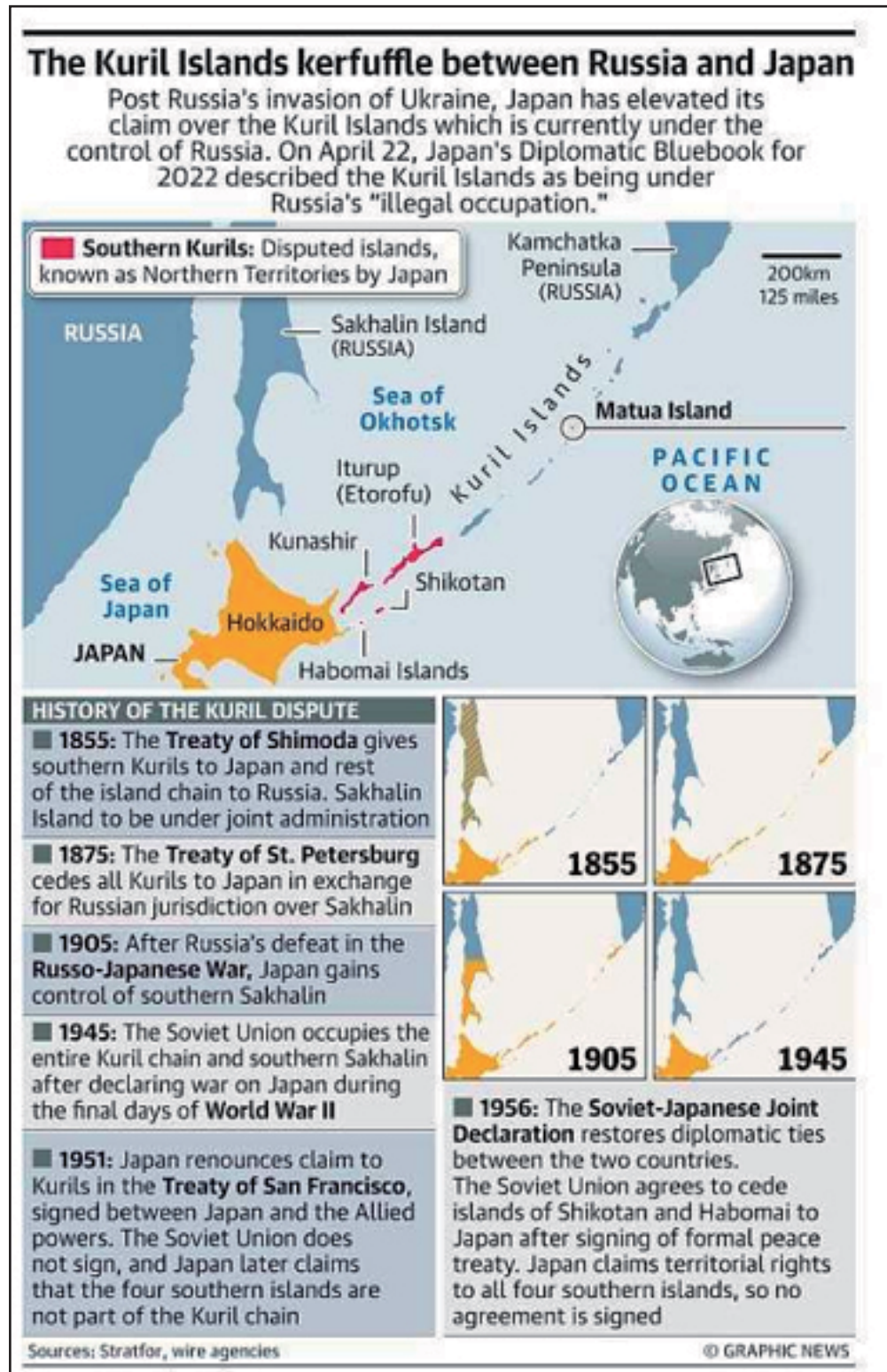
- **Recently, Japan described four islands whose ownership it disputes with Russia as illegally occupied in the latest version of a diplomatic Bluebook.**

About Kuril Island:

- The island chain known as the Kurils stretches north across the Pacific Ocean from the Japanese island of Hokkaido to the southern tip of Russia's Kamchatka Peninsula.

- The Kuril Islands are a **group of 56 volcanic islands** in East Asia, located between the Russian Kamchatka Peninsula and Hokkaido.

- They range from northeast to southwest about a mile away. 1,200 km, this **separates the Okhotsk Sea from the Pacific Ocean.**

- They are under the jurisdiction of the Russian Federation and are part of the Sakhalin Territory, but Japan claims two large southern islands and the islands of Shikotan and Habomai, also known as the "Kuril Islands".

Background:

- Japanese people migrated north to the islands in the 18th and 19th century, including members of Hokkaido's minority Ainu community.

- **Treaty of Shimoda:** In 1855, Russia and Japan signed the Treaty of Shimoda, which gave Japan ownership of the four southern islands and Russia ownership of everything to the north.

  ⊙ Communities developed on three of the islands and by the time World War II began, there were 17,000 Japanese residents.

- Russia took control of the islands at the end of the war, and by 1949 it had deported all residents to Japan.

- **San Francisco Peace Treaty:** Under the 1951 San Francisco Peace Treaty, signed between the Allies and Japan, Japan renounced "all right, title and claim to the Kuril Islands", as well as over other possessions.

The Kuril Islands kerfuffle between Russia and Japan

Post Russia's invasion of Ukraine, Japan has elevated its claim over the Kuril Islands which is currently under the control of Russia. On April 22, Japan's Diplomatic Bluebook for 2022 described the Kuril Islands as being under Russia's "illegal occupation."

Southern Kurils: Disputed islands, known as Northern Territories by Japan

Kamchatka Peninsula (RUSSIA)

200km
125 miles

RUSSIA

Sakhalin Island (RUSSIA)

Sea of Okhotsk

Matua Island

Kuril Islands

Iturup (Etorofu)

PACIFIC OCEAN

Kunashir

Shikotan

Sea of Japan

Hokkaido

JAPAN

Habomai Islands

HISTORY OF THE KURIL DISPUTE

■ **1855:** The **Treaty of Shimoda** gives southern Kurils to Japan and rest of the island chain to Russia. Sakhalin Island to be under joint administration

■ **1875:** The **Treaty of St. Petersburg** cedes all Kurils to Japan in exchange for Russian jurisdiction over Sakhalin

■ **1905:** After Russia's defeat in the **Russo-Japanese War,** Japan gains control of southern Sakhalin

■ **1945:** The Soviet Union occupies the entire Kuril chain and southern Sakhalin after declaring war on Japan during the final days of **World War II**

■ **1951:** Japan renounces claim to Kurils in the **Treaty of San Francisco,** signed between Japan and the Allied powers. The Soviet Union does not sign, and Japan later claims that the four southern islands are not part of the Kuril chain

1855

1875

1905

1945

■ **1956:** The **Soviet-Japanese Joint Declaration** restores diplomatic ties between the two countries. The Soviet Union agrees to cede islands of Shikotan and Habomai to Japan after signing of formal peace treaty. Japan claims territorial rights to all four southern islands, so no agreement is signed

Sources: Stratfor, wire agencies

© GRAPHIC NEWS

- ◉ But this resolved nothing, because Russia did not sign the treaty and the Japanese government has never recognised the four islands as part of the Kuril chain.

- **Japan-Soviet Joint Declaration:** In 1956, the Japan-Soviet Joint Declaration restored diplomatic ties between the two nations, but a formal peace deal remained out of reach because of the territorial dispute.

  - ◉ At the time, Russia proposed returning the two islands closest to Japan, a deal Japan rejected, in part because the two islands represent only 7% of the land in question.

- Since then, the dispute has remained unresolved.

Significance:

- The islands are surrounded by rich fishing grounds and are thought to have offshore reserves of oil and gas.
- Rare rhenium deposits have been found on the Kudriavy volcano on Iturup.
- Tourism is also a potential source of income, as the islands have several volcanoes and a variety of birdlife.

> **Diplomatic Bluebook:**
> - The Diplomatic Bluebook of Japan is an **annual report on Japan's foreign policy** and international diplomacy published by the Ministry of Foreign Affairs in Japan.
> - It has been published every year since its **first issue in September 1957.**

UNION AGRICULTURE MINISTRY LAUNCHES 'KISAN BHAGIDARI, PRATHMIKTA HAMARI' CAMPAIGN

⊙ **CONTEXT:**   **Ministry of Agriculture and Farmers Welfare is organizing the 'Kisan Bhagidari, Prathmikta Hamari' campaign.**

About 'Kisan Bhagidari, Prathmikta Hamari' campaign:

- 'Kisan Bhagidari, Prathmikta Hamari' is being **organized from 25th April to 30th April 2022** as **part of Azadi Ka Amrit Mahotsav.**
- During the campaign, **Department of Agriculture and Farmers Welfare** will organize **countrywide programs at regional level for farmers**.
- The Department of Agriculture Research and Education would be organ**ising a Krishi Mela at each Krishi Vigyan Kendra** and field exhibition **on natural farming.**
  - Union Agriculture Minister would be launching country wide workshop on crop insurance organised by **common service centre (CSC).**
- A Discourse on agro ecological and livestock practices would be held under **DAY-NRLM** along with Ministry of Rural Development.
- During the week a **webinar on One District One Product (ODOP)** would be held by the Ministry of Commerce and Ministry of Food Processing Industries.
- A **National Atma Nirbhar Bharat Conclave** of 75 selected farmers and entrepreneurs would also be held.
- **The following milestones of agriculture development in 75 years of Indian Independence will be highlighted during the said campaign:**
  - Green Revolution: Self-sufficiency in food grain production;
  - Largest producer of horticulture crops – Ginger, Banana, Mango & Papaya;
  - Yellow Revolution (Operation Golden Flow);
  - Sweet Revolution: Honey Production;
  - Improvement in crop irrigation;
  - Use of ICT in agriculture;
  - Application of remote sensing/ GIS/Drones in agriculture;
  - Application of Bio-technology in Agriculture;

- ◉ Success of Watershed Development Progarmme;

- ◉ Self-sufficiency in seeds and fertilizer;

- ◉ Advancement in farm mechanization;

- ◉ Soil Health Management (INM)

- ◉ Effective management of pests (IPM)

- Kisan Bhagidari Prathmikta Hamari Campaign will highlight the activities & achievements under various flagship schemes of Government of India, namely:

  - ◉ Pradhan Mantri Kisan Samman Nidhi;

  - ◉ Pradhan Mantri Fasal Bima Yojana;

  - ◉ Pradhan Mantri Krishi Sinchai Yojana – Per Drop More Crop;

  - ◉ Pradhan Mantri Kisan Maandhan Yojana;

  - ◉ Kisan Credit Card;

  - ◉ Agriculture Credit;

  - ◉ e-National Agriculture Market (e-NAM);

  - ◉ Farmer Producer Organizations (FPOs);

  - ◉ Soil Health Card;

  - ◉ Organic and Natural Farming;

  - ◉ Plant Protection and Plant Quarantine;

  - ◉ Bee-keeping;

  - ◉ Farm Mechanization;

  - ◉ National Food Security Mission;

  - ◉ Seed and Planting Material;

  - ◉ Mission on Integrated Development of Horticulture;

  - ◉ Extension Reforms (ATMA);

WORLD'S FIRST CRYPTO-BACKED PAYMENT CARD LAUNCHED

◉ **CONTEXT:**   **London-based Cryptocurrency lender, Nexo has joined hands with global payments company Mastercard to launch the world's first "crypto-backed" payment card.**

About the card:

- Nexo's zero-cost credit will be available to eligible Nexo clients in Europe.

- The Card is linked to a Nexo-provided, crypto-backed credit line that allows cardholders to use their digital assets as collateral rather than selling them.

- The credit line is dynamic and can use multiple assets as collateral, including Bitcoin, Ethereum, and Tether.

- The card will be accepted by 92 million merchants worldwide where Mastercard is accepted, allowing investors to spend up to 90% of the fiat value of their crypto without selling any of it.

- Users can also earn up to 2% crypto cash back with each transaction.

- The Card also comes with direct Apple Pay and Google Pay integrations. Cardholders can add it to their preferred mobile wallet from the Nexo Wallet App.

- The company is planning to add debit-type card functionality to it and expand the offering internationally beyond Europe later.

SCIENTISTS DISCOVER NEW EEL SPECIES FROM KERALA, BENGAL

⊙ **CONTEXT:**   **A group of Indian scientists have discovered a new species of eel from among specimens collected from the Kalamukku and Digha Mohana fishing harbours in Kerala and West Bengal respectively.**

About New Eel Species – Ariosoma Indicum:

- The newly discovered eel belongs to the **Congrid eels group.**

- It has been named **Ariosoma indicum**.

  - The term Indicum means that it was **found in India**.

- The **total length** of the new species is **362 millimetres**.

- The eel has the following **features** according to the recent paper:

  - A **greenish-brown body**, with faint dark bands on the dorsal portion of the head

  - **Minute dark pigmentation patches** on the extremities of the lower jaw

  - Bicoloured **pectoral fin**

  - A short **wedge-shaped pointed vomerine teeth patch**, with three or four rows in the anterior portion

- Ariosoma indicum is possibly **distributed along the Indian coast**, including the coastal waters of Kerala and West Bengal.

- The **Ariosoma genus has seven species**, including the newly identified eel that have been documented in Indian waters.

- Globally, there are 223 species in the genus.

- The new eel species is **not listed as 'Threatened' or 'Endangered'** by the International Union for Conservation of Nature's Red List or the Convention on International Trade in Endangered Species of Wild Fauna and Flora.
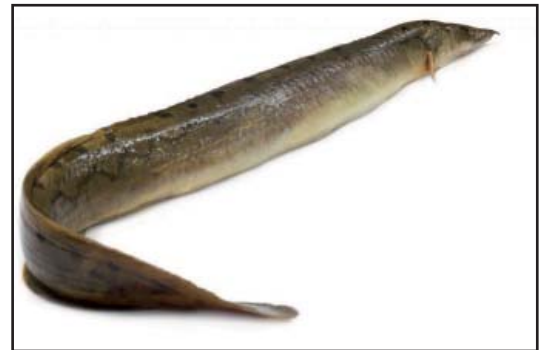
> **About National Bureau of Fish Genetic Resources:**
>
> - ICAR-National Bureau of Fish Genetic Resources (ICAR-NBFGR) was established in December 1983 in a rented premises at Allahabad under the aegis of Indian

Council of Agricultural Research to undertake research related to the conservation of fish germplasm resources of the country.

- The Bureau's permanent infrastructure was developed at **Lucknow, U.P in 1999**.
- **Vision:** The Institute's vision is assessment and conservation of fish genetic resources for intellectual property protection, sustainable utilization and posterity.
- **Mandate:** The mandate of the Institute includes collection, classification and cataloguing of fish genetic resources of the country, maintenance and preservation of fish genetic material for conservation of endangered fish species and evaluation and valuation of indigenous and exotic fish species.
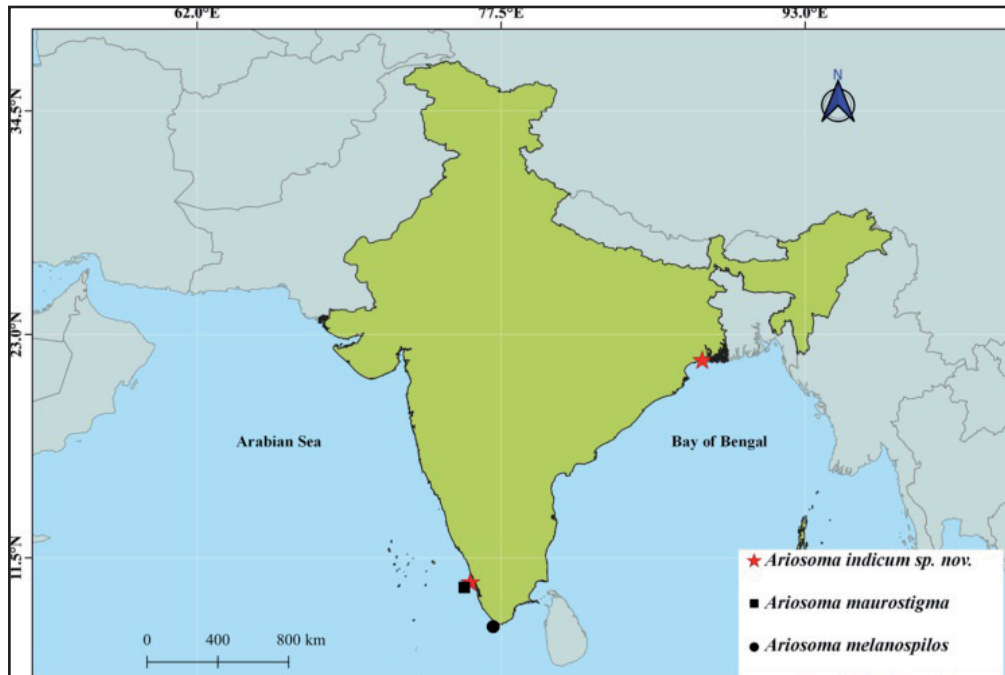
INDIA'S FIRST PURE GREEN HYDROGEN PLANT COMMISSIONED IN JORHAT

⊙ **CONTEXT:** **Oil India Limited (OIL) has recently taken the first significant step towards Green Hydrogen Economy in India with the commissioning of India's First 99.999% pure Green Hydrogen pilot plant.**

About India's first pure green hydrogen plant:

- **Oil India Limited** (OIL), India's second largest National Exploration & Production Company, has taken the first significant step towards Green Hydrogen Economy in India with the commissioning of **India's First 99.999% pure Green Hydrogen pilot plant** with an installed capacity of **10 kg per day** at its **Jorhat Pump Station in Assam**.

- The plant was commissioned in a record time of 3 months.

- The **plant produces Green Hydrogen** from the electricity generated by the existing 500kW Solar plant **using a 100 kW Anion Exchange Membrane (AEM) Electrolyser array**. The use of AEM technology is being used for the first time in India.

- This plant is expected to increase its production of green hydrogen from 10 kg per day to 30 kg per day in future.

Green Hydrogen

- 'Green hydrogen' is pure hydrogen produced using renewable energy sources such as wind or solar power.

- There are no natural hydrogen deposits on earth; it has to be extracted from other compounds by a chemical process.

- If renewable energy (e.g. from Solar panels) is used to generate electricity for the electrolysis of water then the green hydrogen can be generated without any harmful emissions.

# CRIMSON HORNED PHEASANT SEEN AFTER 90 YEARS

⊙ **CONTEXT:**   **Scientists of the Zoological Survey of India (ZSI) have spotted crimson horned pheasant in Senchal Wildlife Sanctuary in West Bengal's Darjeeling district after nearly 90 years in that particular area.**

About Satyr Tragopan or crimson horned pheasant:

- The male Satyr Tragopan (Tragopan satyra) is one of the most beautiful birds in India and also one of the rarest and is best seen in Neora Valley National Park of Darjeeling district.

- It is to be mentioned that sighting of the satyr tragopan was first reported by Hickell in 1842

- Male Satyr's are 68 cm and are a bright crimson red with white spots. Females are smaller and less conspicuous and brown in colour.

- Tragopans are often called "horned pheasants" because they display horn-like projections during courtship.

- Like other Tragopans, the Satyr is faced with habitat destruction and hunting pressure and is now considered to be near-threatened.

- It is classified near-threatened by the International Union for Conservation of Nature.

- These birds reside in moist oak and rhododendron forests with dense undergrowth and bamboo clumps. They range from 2400 to 4200 metres in summer and 1800 metres in winter.

About Senchal Wildlife Sanctuary

- Formed in 1915, Senchal Wildlife Sanctuary is one of the oldest sanctuaries in India located on the outskirts of Darjeeling town.

- It is one of the oldest wildlife sanctuaries of India and covers an area of 38.6 km2 (14.9 sq mi).

- The elevation ranges from 1,500 to 2,600 m (4,900 to 8,500 ft).

- It provides habitat for barking deer, wild boar, Himalayan black bear, Indian leopard, jungle cat, rhesus monkey, Assam macaque, Himalayan flying squirrel.

Darjeeling District/Taluk Map

Map prepared by: IGCMC, WWF-India
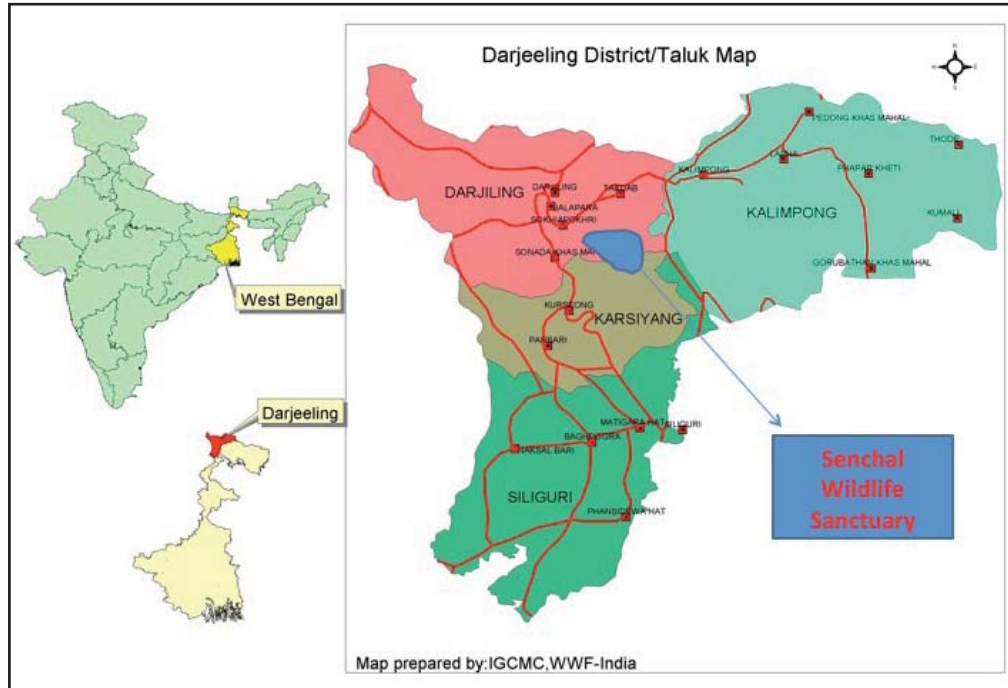
8TH NATIONAL LEVEL POLLUTION RESPONSE EXERCISE BY COAST GUARD- NATPOLREX

⊙ **CONTEXT:**   **Defence Secretary recently inaugurated, the 8th edition of two-day National Level Pollution Response Exercise, 'NATPOLREX-VIII', being conducted by Indian Coast Guard (ICG) off Mormugao harbour, Goa.**

About the exercise:

- The **objective** of NATPOLREX-VIII is to enhance the preparedness and response capability of all the stakeholders in combating marine spills.

- It **aims at validating the procedures and guidelines as contained in the National Oil Spill Disaster Contingency Plan (NOSDCP**) at the national and regional levels under the aegis of SACEP MoU to which India is a member state.

- The event is being attended by more than 85 participants from 50 agencies, including 29 observers from 22 friendly foreign countries & International Organisations and two Coast Guard ships from Sri Lanka and Bangladesh.

COASTAL EROSION IS CAUSE OF WORRY

⊙ **CONTEXT:**   **27% of coastline expanded between 1990 and 2018, according to a report by Union Ministry of Earth Sciences.**

Coastlines in India

- Length of the coastline of India including the coastlines of Andaman and Nicobar Islands in the Bay of Bengal and Lakshadweep Islands in the Arabian Sea is 7517 km.

- Length of Coastline of the Indian mainland is 6100 km which is surrounded by the Arabian Sea in the west, Bay of Bengal in the east, and the Indian Ocean in the south.

What is the need for prevention of Coastal Erosion?

- The coastal regions where land and water meet are ecologically dynamic and sensitive regions, as marine and coastal ecosystems continuously impact on each other.

- These regions have a rich ecosystem such as mangroves, water bodies, seaweeds coral reefs, fisheries and other marine life, and other coastal and marine vegetation.

- These ecosystems protect the region from saline winds, cyclones, tsunami waves etc., promote carbon sequestration and promote biodiversity as well as provide raw materials for a number of manufacturing activities. Hence, this is an alarming situation for us to overcome from the coastal erosion.

Causes of Coastal Erosion

- Wave energy is considered to be the primary reason for coastal erosion.

- Natural hazards like cyclones, thermal expansion of seawater, storm surges, tsunami etc due to the melting of continental glaciers and ice sheets as a result of climate change hamper the natural rhythm and precipitate erosion.

- Strong littoral drift resulting in sand movement can also be considered as one of the major reasons for coastal erosion.

- Dredging, sand mining and coral mining have contributed to coastal erosion causing sediment deficit, modification of water depth leading to longshore drift and altered wave refraction.

- Coastal erosion has been sparked by fishing harbours and dams constructed in the catchment area of rivers and ports reducing the flow of sediments from river estuaries.

- Heavy rainfall can enhance the saturation of soils, with high saturation leading to a reduction in the soil's shear strength, and a corresponding increase in the chance of slope failure (landslides).

Rainfall Intensity and Runoff

- The impact of raindrops will break up the soil and water build-up will create runoff, taking sediment with it

Why erosion in eastern coast more than western coast?

- The eastern coast underwent more erosion due to frequent cyclonic activities from Bay of Bengal in the past three decades, compared to the western coast, which remained largely stable.

RUSSIA ANNOUNCES SUCCESSFULLY TEST-LAUNCHED OF SARMAT INTERCONTINENTAL BALLISTIC MISSILE

⊙ **CONTEXT:**   **Russia announced that it successfully test-launched a Sarmat intercontinental ballistic missile recently.**

About Sarmat Intercontinental Ballistic Missile:

- Sarmat is an intercontinental ballistic missile **capable of nuclear charges**.

- The weapon **can be deployed with 10 or more warheads** on each missile.

- The long-range missile has been in development since the 2000s.

- The Sarmat is designed **to elude anti-missile defence systems** with a short initial boost phase, giving enemy surveillance systems a tiny window to track.

- **Weighing more than 200 tonnes** and able to transport multiple warheads, Putin says the missile can hit any target on Earth.

- Sarmat is the most powerful missile with the **longest range of destruction of target**s in the world.

- The Sarmat missile test took place at the **Plesetsk cosmodrome in northwest Russia's Arkhangelsk region.**

- **Dubbed Satan 2** by Western analysts, the Sarmat is among Russia's next-generation missiles that Putin has called "invincible," and which also include the Kinzhal and Avangard hypersonic missiles.

- Last month, Russia said it used Kinzhal for the first time in warfare to strike a target in Ukraine, where Russian troops have been engaged in a special military operation since February 24.

SUBMARINE VAGSHEER AND ITS FEATURES, CAPABILITIES

⊙ **CONTEXT:** **Vagsheer, the sixth submarine of the P75 project of the Indian Navy was launched recently.**

About Submarine 'Vagsheer':

- Vagsheer is named after the sand fish, a deep sea predator of the Indian Ocean.

- The first submarine Vagsheer, from Russia, was commissioned into the Indian Navy on December 26, 1974, and was decommissioned on April 30, 1997.

  ◎ The new Vagsheer will be officially named at the time of its commissioning.

- **Specifications:**

  ◎ Vagsheer can take up to eight officers and 35 men.

  ◎ It is 67.5 metres long and 12.3 metres high, with a beam measuring 6.2 metres.

  ◎ Vagsheer can reach **top speed of 20 knots** when submerged and a top speed of 11 knots when it surfaces.

  ◎ The **hull, fin and hydroplanes are designed for minimum underwater resistance** and all equipment inside the pressure hull is mounted on shock-absorbing cradles for enhanced stealth.

- **Features:**

  ◎ Vagsheer is a **diesel attack submarine**, **designed to perform sea denial as well as access denial warfare against the adversary.**

  ◎ It can do offensive operations across the spectrum of naval warfare including **anti-surface warfare, anti-submarine warfare, intelligence gathering, mine laying and area surveillance.**

  ◎ It is **enabled with a C303 anti-torpedo counter measure system.**

  ◎ It can carry up to 18 torpedoes or Exocet anti-ship missiles, or 30 mines in place of torpedoes.

  ◎ Its superior stealth features include advanced acoustic absorption techniques, low radiated noise levels, hydro-dynamically optimised shape, and it has the ability to launch a crippling attack using precision guided weapons, underwater or on surface.

  ◎ Scorpene submarines can undertake various types of missions such as anti-surface warfare, anti-submarine warfare, intelligence gathering, mine laying, area surveillance etc.

List of other submarines under Scorpene-class submarines:

- First submarine: **INS Kalvari**- commissioned on 14 December 2017.
- Second: **INS Khanderi** – September 2019
- Third**: INS Karanj** – March 2021
- Fourth: **INS Vela** – November 2021
- Fifth: **INS Vagir**- launched in November 2020 and is undergoing sea trials.

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.
- 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.
- Under P75, INS Kalvari, INS Khanderi, INS Karanj and INS Vela have been commissioned. Sea trials are on for Vagir. Vagsheer is the sixth; its production was delayed due to the pandemic.

Scorpene Class Submarine:

- These are diesel-electric attack submarines jointly developed by the French company - Naval Group (formerly Direction des Constructions Navales (DCNS)) and the Spanish company - Navantia.
- These submarines can undertake multifarious tasks typically undertaken by any modern submarine which include anti-surface as well as anti-submarine warfare.
- They feature diesel propulsion and additional Air-Independent Propulsion (AIP).
- AIP is a marine propulsion technology that allows a non-nuclear submarine to operate without access to atmospheric oxygen (by surfacing or using a snorkel).
- The system of AIP fitted in this class of submarines is a modified version of nuclear propulsion system with heat being generated by ethanol and oxygen.
- The combustion of the ethanol and stored oxygen, at a pressure of 60 atm, generates steam which powers a conventional turbine power plant.
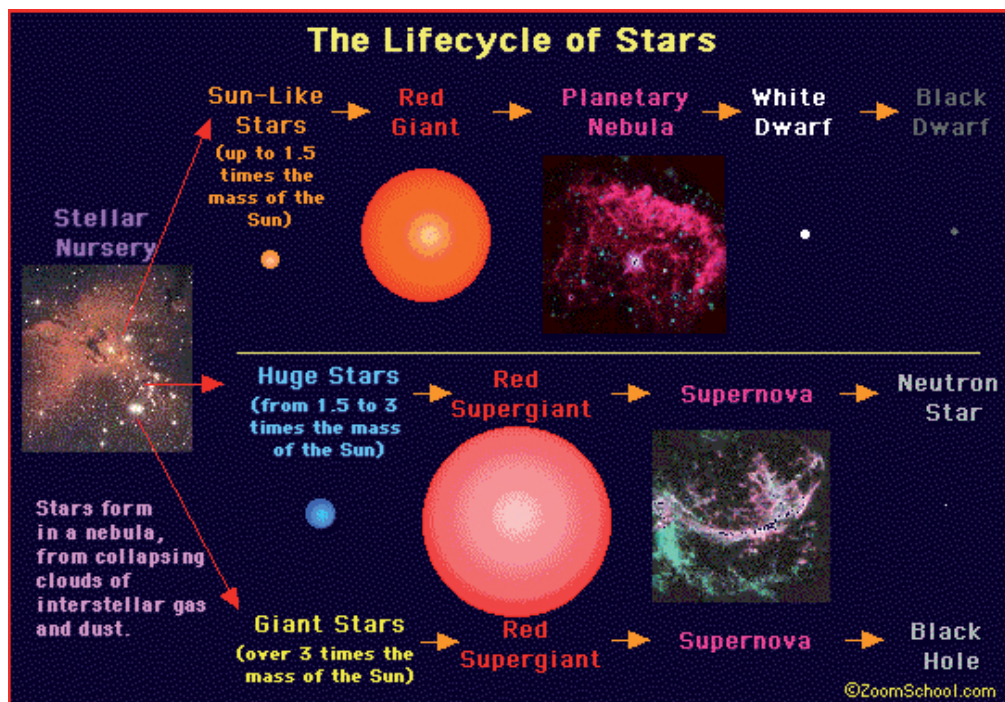
BLUE STRAGGLER STARS

◉ **CONTEXT:**   **Indian Institute of Astrophysics, Bengaluru, researchers have found support for one way to understand the aberrant behaviour of Blue Straggler stars.**

- **For this, the researchers also made use of the observations by the UVIT instrument (UltraViolet Imaging Telescope) of ASTROSAT, India's first science observatory in space.**

About Blue stragglers Stars:

- Blue stragglers, a **class of stars on open or globular clusters** that stand out as they are bigger and bluer than the rest of the stars; have intrigued scientists who have for long probed their origin.

- Carrying out the first-ever comprehensive analysis of blue stragglers, **Indian researchers found that half of the blue stragglers in their sample are formed through mass transfer from a close binary companion star, one third are likely formed through collisions of 2 stars, and the remaining are formed through interactions of more than 2 stars.**

- A bunch of stars born at the same time from the same cloud form a star cluster.

- As time passes, each star evolves differently depending on its mass.

- The most massive and bright stars evolve and move off the main sequence creating a bend in their track, known as the turnoff.

- Stars above this bend or brighter and hotter stars are not expected in a cluster, as they leave the main sequence to become red giants.

- But in **1953, Allan Sandage found that some stars seem to be hotter than the turnoff of the parent cluster.**


- Initially, these blue stars still straggling above the turnoff were not part of these clusters.

- However, later studies confirmed that these stars are indeed cluster members, and they were termed **"Blue Stragglers".**

- The only probable way these stars can still be present in these clusters is if they have somehow acquired extra mass along the way while on the main sequence.
- Confirming the mechanisms of the mass gain required a study using a large sample of blue-straggler stars and estimates of the mass they have gained.

Indian Institute of Astrophysics

- The Indian Institute of Astrophysics is a **premier institute devoted to research in astronomy, astrophysics and related physics.**
- It traces its origins back to an **observatory set up in 1786 at Madras** which from the year 1792 began to formally function at its Nungambakkam premises as the Madras Observatory. **In 1899, the observatory moved to Kodaikanal.**
- In the year **1971, the Kodaikanal Observatory became an autonomous society, the Indian Institute of Astrophysics.**
- The **headquarters were shifted to Bengaluru** into its present campus in Koramangala in **1975.**
- Today, funded by the Department of Science and Technology, the Institute ranks as a premier institution devoted to research and education of astronomy and physics in the country.
- The **main observing facilities of the Institute are located at Kodaikanal, Kavalur, Gauribidanur and Hanle.**
- The Kodaikanal Observatory has for over a century been the principal centre of activity in observational solar and atmospheric physics.
- The **Vainu Bappu Observatory at Kavalur** has been the main optical observatory of the Institute for nighttime astronomy since the late 1960s.
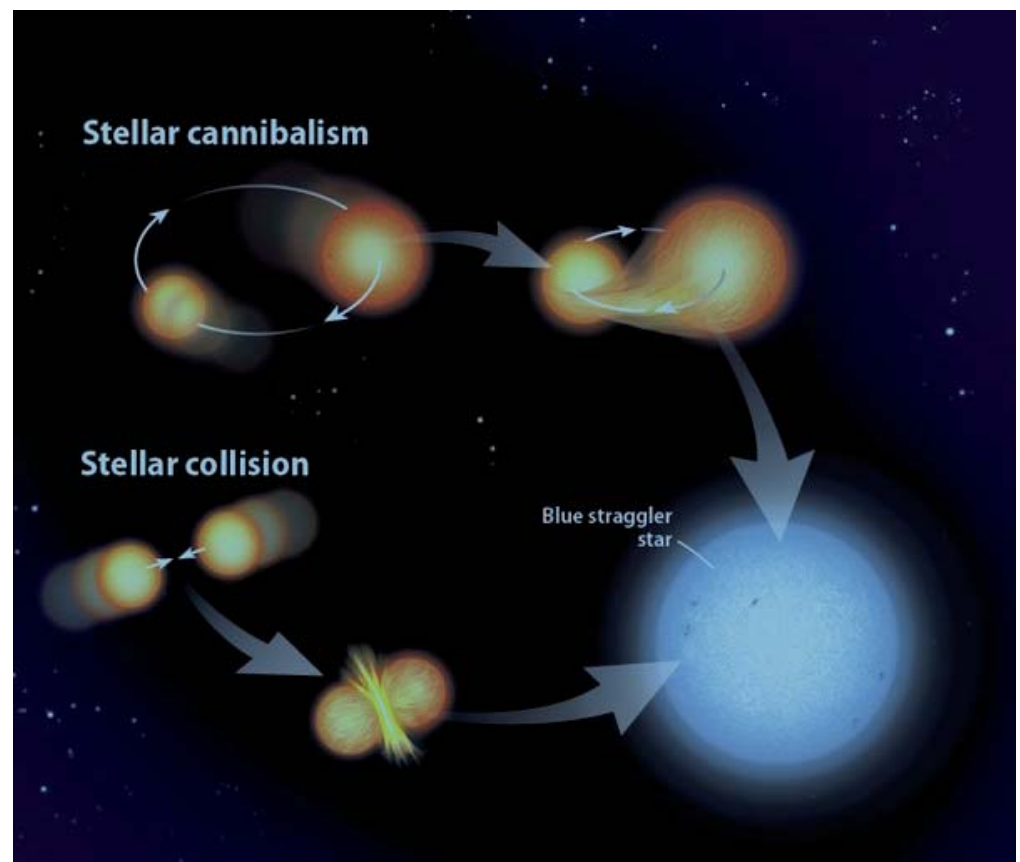
WHO SAYS AT LEAST ONE CHILD HAS DIED AFTER INCREASE OF ACUTE HEPATITIS CASES IN CHILDREN

⦿ **CONTEXT:**   **The World Health Organization recently said that at least one child death had been reported following an increase of acute hepatitis of unknown origin in children.**

The news:

- The WHO issued the figures as health authorities around the world investigate **a mysterious increase in severe cases of hepatitis - inflammation of the liver – in young children.**

- At least **169 cases** had been reported in children in **12 countries** including in the UK, US, Spain, Israel, and Ireland - among youngsters aged from **one month to 16 years.**

  ⦿ The UK has reported 114 of the cases.

- Scientists currently believe that an **adenovirus, a common type of virus** that can cause common colds, could be behind the wave of acute hepatitis cases.

  ⦿ At least **74 of the children** who are affected have tested positive for **adenovirus** infection.

  ⦿ **COVID-19 infection was identified in 20** of those tested and

  ⦿ **19 cases** were detected with a **COVID-19 and adenovirus co-infection**.

- **Concern:** The cases are more unusual because they are **not linked to any of the five typical strains of the virus – hepatitis A, B, C, D and E.**

- **Symptoms:** Hepatitis symptoms include dark urine, yellowing of the eyes and skin, sickness, fatigue, fever, loss of appetite, nausea, vomiting, abdominal pain, light-coloured stools and joint pain.

- There is **no specific treatment for hepatitis** but drugs like steroids can help, as well as medicines to treat the symptoms.

About Hepatitis:

- Hepatitis is inflammation of the liver that is usually caused by a viral infection or liver damage from drinking alcohol.

- Short-term hepatitis often has no noticeable symptoms.

- But if some develop they can include dark urine, pale grey-coloured poo, itchy skin and yellowing of the eyes and skin.

- They can also include muscle and joint pain, a high temperature, feeling and being sick and being unusually tired all of the time.

- When hepatitis is spread by a virus, it's usually caused by consuming food and drink contaminated with the faeces of an infected person or blood-to-blood or sexual contact.

POSTPARTUM DEPRESSION

⦿ **CONTEXT:**   **Postpartum depression is linked to chemical, social, and psychological changes that happen when having a baby.**

About Postpartum depression:

- Postpartum depression (PPD) is a complex mix of physical, emotional, and behavioral changes that happen in some women after giving birth.

- According to the DSM-5, a manual used to diagnose mental disorders, PPD is a form of major depression that begins within 4 weeks after delivery.

- Most new mothers experience the "baby blues" after delivery.

  - About 1 out of every 10 of these women will develop a more severe and longer-lasting depression after delivery.

  - About 1 in 1,000 women develop a more serious condition called **postpartum psychosis.**

- The chemical changes involve a rapid drop in hormones after delivery.

  - The actual link between this drop and depression is still not clear.

  - But what is known is that the levels of estrogen and progesterone, the female reproductive hormones, increased ten-fold during pregnancy.

  - Then, they drop sharply after delivery. By 3 days after a woman gives birth, the levels of these hormones drop back to what they were before pregnancy.

- In addition to these chemical changes, the social and psychological changes of having a baby create an increased risk of depression.

Types of Postpartum Depression

There are three terms used to describe the mood changes women can have after giving birth:

- The **"baby blues"** happen to as many as 70% of women in the days right after childbirth.

  - The baby blues may last only a few hours or as long as 1 to 2 weeks after delivery.

  - Usually you don't need treatment from a health care provider for baby blues.

  - Often, joining a support group of new moms or talking with other moms helps.

- **Postpartum depression (PPD)** can happen a few days or even months after childbirth. PPD can happen after the birth of any child, not just the first child.

  - You can have feelings similar to the baby blues — sadness, despair, anxiety, crankiness — but you feel them much more strongly.

  - PPD often keeps you from doing the things you need to do every day.

  - When your ability to function is affected, you need to see a health care provider, such as your OB/GYN or primary care doctor.

- **Postpartum psychosis** is a very serious mental illness that can affect new mothers. This illness can happen quickly, often within the first 3 months after childbirth.

  - Women can lose touch with reality, having auditory hallucinations (hearing things that aren't actually happening, like a person talking) and delusions (strongly believing things that are clearly irrational).

  - Visual hallucinations (seeing things that aren't there) are less common.

  - Women who have postpartum psychosis need treatment right away and almost always need medication.

  - Sometimes women are put into the hospital because they are at risk of hurting themselves or someone else.

ISRO TO CONDUCT RLV LANDING EXPERIMENT SOON

⊙ **CONTEXT:** The Indian Space Research Organisation (ISRO) is aiming to carry out landing experiment (LEX) which will be a critical component of the Reusable Launch Vehicle-Technology Demonstration (RLV-TD) programme.

- **It will be the second in the series of such experimental flights for the RLV-TD programme.**

About

- In January 2012, the design of ISRO's reusable launch vehicle was approved by the "National Review Committee" and clearance was granted to build the vehicle.

- The vehicle was named "Reusable Launch Vehicle-Technology Demonstrator" (RLV-TD). ISRO aims to bring down the cost of payload delivery to low Earth orbit by 80% from existing $20,000/kg to $4,000/kg.

- The first reusable spacecraft to reach orbit was the Space Shuttle (in 1981), which failed to accomplish the intended goal of reducing launch costs to below those of expendable launch systems.

- During the 21st century, commercial interest in reusable launch systems has grown considerably, with several active launchers.

- The RLV-TD successfully completed its first atmospheric test flight on 23 May 2016, which lasted for 770 seconds and reached a maximum altitude of 65 kilometres (40 mi).

- It was designed to evaluate various technologies, and development of the final version is expected to take 10 to 15 years.

- The fully developed RLV is expected to take off vertically like a rocket, deploy a satellite in orbit, return to Earth, and land on a runway.

> **What is RLV-TD technology?**
>
> - RLV-TD is India's first un-crewed flying testbed developed for the Indian Space Research Organisation (ISRO)'s Reusable Launch Vehicle Technology Demonstration Programme.
>
> - It is a scaled down prototype of an eventual two-stage-to-orbit (TSTO) reusable launch vehicle.
>
> - **Reusable launch vehicle:**
>
> - A reusable launch system is a launch system that allows for the reuse of some or all of the component stages. To date, several fully reusable suborbital systems and partially reusable orbital systems have been flown.
>
> - A launch system includes the launch vehicle, launch pad, vehicle assembly and fuelling systems, range safety, and other related infrastructure.

About the Experiment

- LEX constitutes the second in the series and subsequent missions include a **return flight experiment and a scramjet propulsion experiment.**

- RLV-LEX involves taking an unmanned, winged prototype to an altitude of about 2.**3 km to 2.4 km on a helicopter.**

- The prototype will be released 3.7 km away from the airstrip and it must travel the distance autonomously, **gain velocity, maintain control** and **come in like any typical aircraft, touching down with the rear wheels first.**

- Currently, ISRO employs expendable rockets such as the **Polar Satellite Launch Vehicle (PSLV)** and the **Geosynchronous Satellite Launch Vehicle (GSLV)** for space missions.
- The height of the prototype has been reduced to maximise velocity.

Benefits

- **Cost effective:** Cheaper access to space is what makes an RLV attractive.
- The RLV-TD programme comprises a series of experimental missions aimed at making India's dream of owning a reusable, two-stage-to-orbit (TSTO) vehicle.
- **Push the space technology**: Forced to put off missions due to the COVID-19 pandemic, ISRO is aiming to step up the pace in 2022.
- Around ten missions are planned this year, including four flights of the PSLV, and the RLV-LEX.

Other related programmes

- The maiden flight of the **Small Satellite Launch** Vehicle by ISRO.
- **GSLV Mk-III** and **GSLV Mk-II**

GENETICALLY MODIFIED MOSQUITOES FOR CONTROLLING VECTOR-BORNE DISEASES? SUCCESSFUL TRIAL GIVES HOPE

⊙ **CONTEXT:**   **Preliminary results of an open-air study of genetically engineered mosquitoes — with an aim to suppress a wild population of virus-carrying mosquitoes — in the United States have shown promising results.**

Genetically Modified Mosquito

- A genetically modified insect is **an insect that has been genetically modified for various reasons such as agricultural production, oil production and pest control.**
- Scientists have moved on from using bed nets and insecticides to kill malaria-spreading mosquitoes, to genetically modify the mosquitoes by inserting a gene that leads to the production of male offsprings.
- Since **only females carry the malaria-causing microorganism**, the spread of the disease is controlled in the short-term while eventually the whole population gets wiped out.
- Scientists **injected a gene from a slime mould into the mosquito** which attached itself to the X chromosome during sperm-making process effectively masking the sperms leading to production of male offsprings.

Aim of the Experiment:

The aim of the experiment by Oxitec, a United Kingdom-based biotechnology firm, is **to reduce the population of wild *Aedes aegypti* mosquitoes** that is a vector for viruses such as chikungunya, dengue, zika and yellow fever. The scientists engineered a gene that will kill the female offspring.

How GM mosquitoes are produced and used to control Ae. aegypti mosquitoes?

- GM mosquitoes are mass-produced in a laboratory to carry two types of genes:

⊙ A **self-limiting gene** that prevents female mosquito offspring from surviving to adulthood.

⊙ A **fluorescent marker gene** that glows under a special red light. This allows researchers to identify GM mosquitoes in the wild.

- GM mosquitoes produced in the laboratory lay eggs. These **eggs carry the self-limiting and fluorescent marker genes.**

- GM mosquito eggs that **carry the self-limiting gene** are released into an area. Once they have hatched and develop through to the adult stage, they are available to mate with wild females. The **genes are passed on to offspring**.

- The **female offspring die before they become adults**. The expected result is that the number of Ae. aegypti mosquitoes in the area decreases.
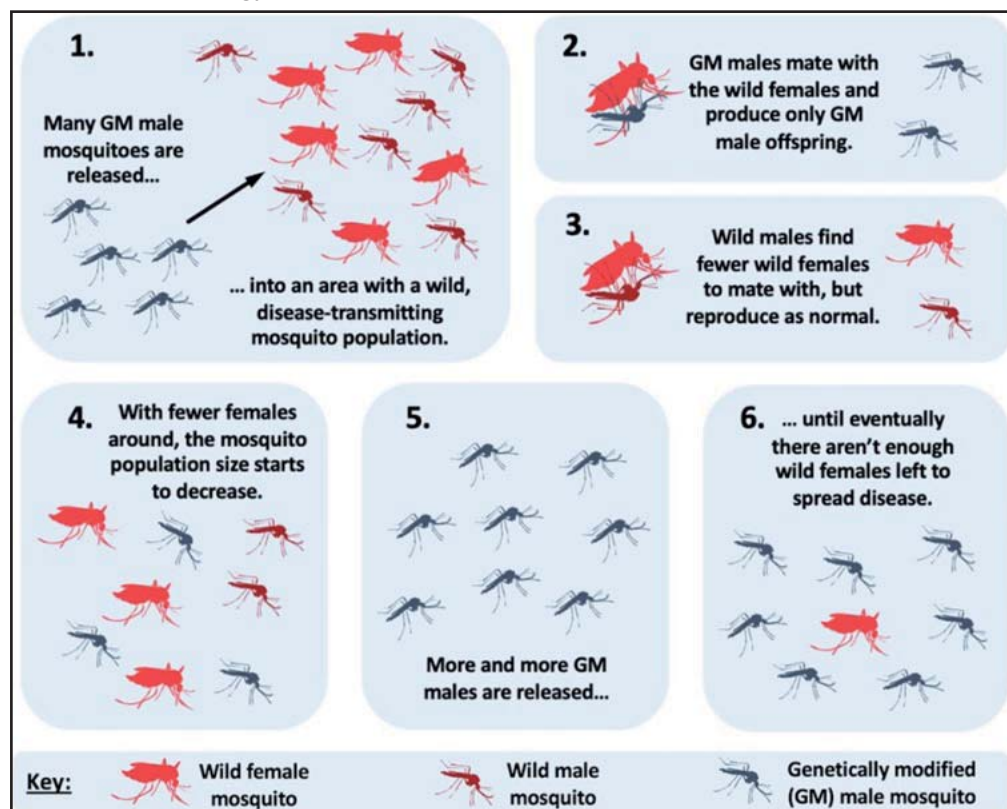
Effectiveness of GM mosquitoes in reducing numbers of mosquitoes

- GM mosquitoes have been **successfully used in parts of Brazil, the Cayman Islands, Panama, and India to control Ae. aegypti mosquitoes**. Since 2019, over 1 billion mosquitoes have been released.

- When GM mosquitoes stop being released into an area, the Ae. aegypti mosquito population will slowly return to "normal levels."

- GM mosquitoes will **only work to reduce numbers of target mosquito species** (e.g., Ae. aegypti), no other types of mosquitoes. Most communities have more than one type of mosquito.

Concerns

There are concerns about using tetracycline on a routine basis for controlling the expression of lethal genes. There are plausible routes for resistance genes to develop in the bacteria within the guts of GM insects fed on tetracycline and from there, to circulate widely in the environment.

NASA ROVER 'PERSEVERANCE' CAPTURES ECLIPSE INVOLVING MARS' SATELLITE 'PHOBOS'

⊙ **CONTEXT:**

The Perseverance Mars rover belonging to the United States National Aeronautics and Space Administration (NASA) has captured Phobos, Mars' potato-shaped moon or satellite.

Background

- NASA had captured Phobos for the first time in 2004, when the twin rovers 'Spirit' and 'Opportunity' took the lapse photos of Phobos during a solar eclipse.

Outcomes

These observations can help scientists better understand Phobos' orbit and how its gravity pulls on the Martian surface, ultimately shaping the red planet's crust and mantle.

- They captured the eclipse with Perseverance's next-generation Mastcam-Z camera, it lasted a little over 40 seconds — much shorter than a typical solar eclipse involving Earth's Moon.

- The Phobos is about 157 times smaller than Earth's Moon. Mars' other moon, Deimos, is even smaller.

- Phobos is getting closer to the Martian surface and is destined to crash into the planet in tens of millions of years,

- Now NASA's rover has provided the most zoomed-in video of a Phobos solar eclipse yet and at the highest-frame rate ever.

> **Mars exploration mission**
> - The Mars 2020 Perseverance mission is part of NASA's Moon to Mars exploration approach, which includes Artemis missions to the Moon that will help prepare for human exploration of the Red Planet.
> - NASA's exploration rovers are: The Adventure Twins, Star Performers, spirit, opportunity and perseverance.

Other Mars missions:

- **India's Mars Orbiter mission**- The **Mars Orbiter Mission (MOM)**, also called **Mangalyaan** is a space probe orbiting Mars since 24 September 2014.

- **Nozami-** Japan's mars mission

- **Phobos-1-** Russia's Mars exploration

INDIAN COAST GUARD'S URJA PRAVAHA INDUCTED AT GUJARAT'S BHARUCH

⊙ **CONTEXT:**   **The Indian Coast Guard Ship (Auxiliary Barge) named Urja Pravaha has been inducted into the Indian Coast Guard at Gujarat's Bharuch.**

About Urja Prabha:

- Urja Prabha is launched at Shoft Shipyard, Bharuch, Gujarat.
- Urja Prabha is 36.96 metres long with a draft of 1.85 metres.
- It is designed to cargo ship fuel, aviation fuel and fresh water with a capacity of 50 ton, 10 ton and 40 ton respectively.
- It will enhance the Indian Coast Guard operations by extending logistics support to Indian Coast Guard ships deployed in the sea at far-flung areas.

About Indian Coast Guard (ICG):

- The **'Nag Committee'** was setup in **1970**, to examine the growing **menace of smuggling**. The committee recommended the need for a separate marine force to deal with smuggling activities.
- In **1972**, the **United Nations Convention on the Laws of the Sea (UNCLOS)** awarded **Exclusive Economic Zones (EEZ)** to all coastal states.
- Thereafter, the Union of India, enacted the **Maritime Zones of India Act 1976**, to claim sovereign rights over the vast sea area of the Exclusive Economic Zone.
- In one stroke, India acquired 2.01 million sq kms of ocean for extensive exploitation of all living and non-living resources, and this vast area clearly needed to be policed.
- Later ICG, was established in **1978 by the Coast Guard Act, 1978.** It performs **non-military functions.**
- It operates under the **Ministry of Defence**.
- Headquarter of the Indian Coast Guard is in **New Delhi**.
- It has **jurisdiction** over the territorial waters of India including **contiguous zone and exclusive economic zone.**
- **Mission:**
  - ⊚ To protect our ocean and offshore wealth including oil, fish and minerals.
  - ⊚ To assist mariners in distress and safeguard life and property at sea.
  - ⊚ To enforce maritime laws with respect to sea, poaching, smuggling and narcotics.
  - ⊚ To preserve marine environment and ecology and protect rare species.
  - ⊚ To collect scientific data and back-up the navy during war.

# WHAT A NEW RESEARCH ABOUT JUPITER'S MOON EUROPA MEANS

⊙ **CONTEXT:**   **A new study found that on one of Jupiter's moons Europa, a prime candidate for life in the solar system, there might be an abundance of water pockets beneath formations called double ridges.**

About Europa

- **Size:** Europa is slightly smaller than Earth's moon and its diameter is about one-quarter that of the Earth.

- **Atmosphere:** Even though Europa has a very thin oxygen atmosphere, it is considered one of the most promising places in the solar system to find present-day environments that are suitable for life beyond the Earth.

- **Water:** It is also believed that underneath Europa's icy surface the amount of water is twice that on Earth.

  - NASA notes that scientists believe Europa's ice shell is 15-25 km thick and is floating on an ocean, which is estimated to be between 60-150 km deep.

  - Interestingly, while its diameter is less than the Earth's, Europa probably contains twice the amount of the water in all of the Earth's oceans.

NASA's Europa Clipper

- NASA is expected to launch its Europa Clipper in 2024.

  - The module will orbit Jupiter and conduct multiple close flybys to Europa to gather data on the moon's atmosphere, surface and its interior.
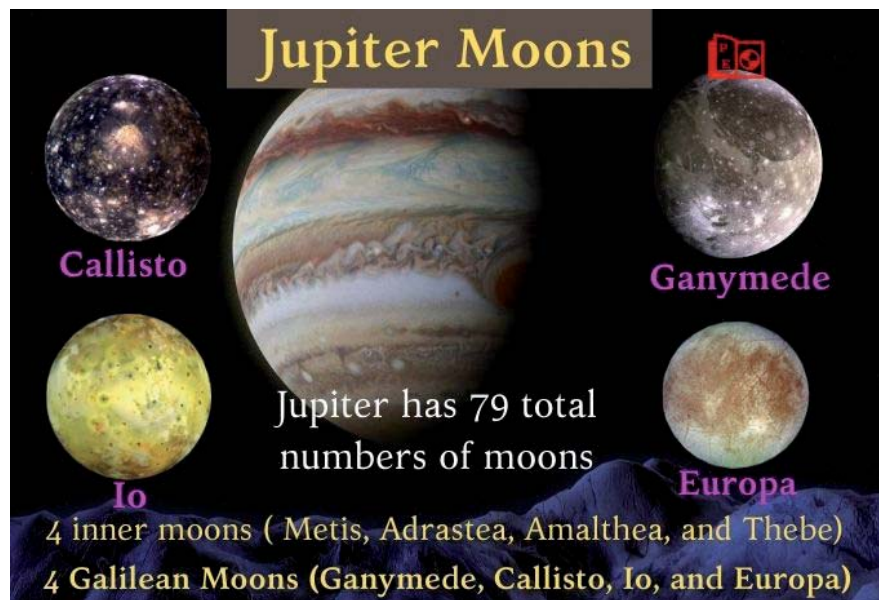
Double ridge Feature:

- Double ridge is the most common type of ridge on Europa: the term "ridge" usually refers to double ridge.

- A ridge pair with **a continuous, V-shaped medial trough whose depth is less than the height of the ridges.**

- They are 100s m wide on average, though in some cases are up to less than 5 km across.

- Double ridges are the most ubiquitous morphology on Europa and run almost linearly with generally uniform morphological characteristics for up to more than 1,000 km.
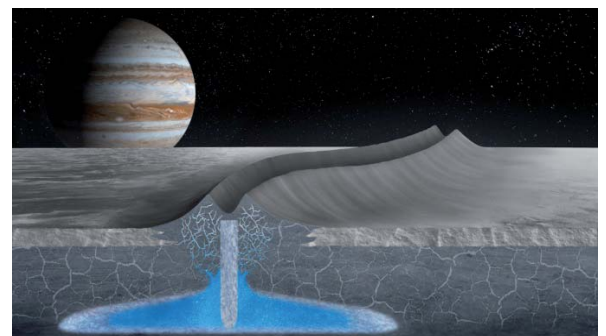
TEA MOSQUITO BUG DESTROYS CASHEW CROP

⊙ **CONTEXT:** **Tea mosquito bugs have attacked acres of cashew crops in Odisha.**

Tea Mosquito Bug:

- **Scientific Name:** Helopeltis antonii
- Tea mosquito bug is a major pest of cashew causing severe damage in several parts of the world.
- Among the four species attacking cashew, H. antonii is the dominant species.
- The pest has got potential to cause as high as cent per cent loss in yield.
- **Season of occurrence:**

  - In general, TMB activity is very less during monsoon period (June- September) and the pest build up commences during October- November synchronizing with the emergence of new flushes after the cessation of monsoon rains.

  - The population reaches a peak during December-January, when the trees are in full bloom while, the pest activity is seen till May unitl harvest.

  - But, the pest incidence may be noticed throughout the year in young plantations.

Management

- Undertake pruning to regulate the shade to facilitate proper penetration of sunlight inside the canopy.
- Spray the following insecticides, thoroughly covering foliage and bark during early morning hours.
  - Monocrotophos at new flush formation.
  - Spray endosulfan or carbaryl in 1500-2000 L of water per ha and Urea 3% at flower initiation and again at fruiting time
- Do not interplant cashew with crops that are host for Helopeltis bugs, such as cotton, tea, sweet potato, guava and mango.

GIR AWAITS LOCALLY MADE CDV VACCINE FOR LIONS, EXPERTS DIVIDED ON OUTCOME

⊙ **CONTEXT:** **The Gujarat Biotechnology Research Centre has developed and completed the first trials of the Canine Distemper Virus (CDV) vaccine on guinea pigs and rats.**

Canine Distemper Virus (CDV):

- CDV causes a highly contagious and life-threatening disease in dogs (50% fatality rate).

- It infects the spinal cord and brain and also the respiratory and gastrointestinal tracts.

- It is transmitted by airborne route as well as infected body secretions.

- It affects different wild carnivores such as wolves, foxes, raccoons, red pandas, ferrets, hyenas, tigers, and lions.

- In the past, CDV had wiped out 30% of the total population of lions in Serengeti forest areas in East Africa.

- In the current case, the genetic sequence of the virus was compared to available CDV sequences and was found to be related to the East African strains.

Status of CDV in India:

- The prevalence of this virus and its diversity in wildlife of India has not been studied.

- Only a few reports are available regarding the detection of CDV in captive wild carnivores which included tigers and red pandas.

- A report in 2016 from Etawah, Uttar Pradesh about CDV infection was confirmed by the Indian Veterinary Research Institute.

- There dogs were considered to be the primary source of infection and virus transmission.

About Asiatic lions

- They belong to the category of Pantherine cats.

ASIATIC LION: A SNAPSHOT

APPROX HEIGHT 110 CM	LENGTH 200-280 CM	WEIGHT 110-190 KG	AVE LIFE SPAN 16-18 YEARS	STATUS ENDANGERED	SIZE RELATIVE TO A 6 FT MAN

DISTRIBUTION

Once distributed upto West Bengal and Rewa in Madhya Pradesh

GIR'S LIONS ARE THE LAST ASIATIC LIONS ON EARTH

Lion population at **GIR NATIONAL PARK**

2010 — 411
2015 — 523
2015 — 600*

23 have died (15 Sep-3 Oct)

3.5% OF WORLD'S ASIATIC LION POPULATION HAS BEEN WIPED OUT IN 3 WEEKS

SUSPECTED REASONS

- Canine Distemper Virus (CDV) infection (detected in four dead lions)

- Babesia protozoal infection (detected in eight lions)

REASONS TO WORRY

- CDV killed 1,000 lions in Tanzania in the 1990s

- These infections are contagious and may spread to the remaining lion population

- Presence of all the lions at one place could be dangerous in case of a viral epidemic

THE **LAST** LIONS

ASIATIC LIONS AND WHY THE RECENT SPATE OF LION DEATHS IN GIR IS A MATTER OF CONCERN

- The Asiatic Lions in Gujarat is restricted to Gir National Park in the state.

- It is listed as 'Endangered' under the IUCN Red List.

- It is listed in Schedule-I of the Wildlife (Protection) Act, 1972.

- In the initial stage, the lions were spread from the east of the Indus River to West Bengal and also to Narmada river in Central India.

- Until the 19th century, it occurred in Saudi Arabia,, eastern Turkey, Iran, Mesopotamia.

- Since the turn of the 20th century, it is restricted to the Gir Forest National Park and surrounding areas.

- The lion is one of five pantherine catsinhabiting India, along with the Bengal tiger (P. tigris tigris), Indian leopard (P. pardus fusca), snow leopard (P. uncia) and clouded leopard (Neofelis nebulosa).

- It was also known as the "Indian lion" and the "Persian lion".

Gir Forest:

- Gir is the only natural habitat of world popular Asiatic Lions.

- Besides Africa, Gir National Park in Gujarat is the only place in the world where lions can be spotted roaming freely in the wild.

- In order to conserve the Asiatic Lion, the Government notified the large geographical extent of SasanGir as wildlife sanctuary on in 1965.

- From a population of approximately 20 lions in 1913, they have risen to a comfortable 523 according to 2015 census.

FIRST HUMAN CASE OF H3N8 BIRD FLU

⦿ **CONTEXT:**   **China has recorded the first human infection with the H3N8 strain of bird flu.**

What's happening?

- A four-year-old boy from central Henan province was found to have been infected with the variant after developing a fever and other symptoms.

- The H3N8 variant has previously been detected elsewhere in the world in horses, dogs, birds and seals but no human cases of H3N8 have been reported.

Why it matters?

- It's the first time the virus has jumped from animals to humans but it looks like a one-off jump and further risk of spread is low.

- Many different strains of bird flu are present in China and some sporadically infect people, usually those working with poultry.

- Last year China reported the first human case of H10N3.

Bird Flu:

- Bird flu, or avian flu, is an infectious type of influenza that spreads among birds. In rare cases, it can affect humans.

- There are lots of different strains of bird flu virus. Most of them don't infect humans. But there are 4 strains that have caused concern in recent years:

  ◉ H5N1 (since 1997)

  ◉ H7N9 (since 2013)

  ◉ H5N6 (since 2014)

  ◉ H5N8 (since 2016)

How bird flu spreads to humans?

- Bird flu is spread by close contact with an infected bird (dead or alive).
- This includes:
  - touching infected birds
  - touching droppings or bedding
  - killing or preparing infected poultry for cooking
  - Markets where live birds are sold can also be a source of bird flu.

Different types of avian influenza:

- Avian Influenza (AI) type A viruses are divided into subtypes based on two proteins on the surface of the virus:
  - Hemagglutinin (HA), of which there are 16 subtypes (H1-H16)
  - Neuraminidase (NA), of which there are 9 subtypes (N1-N9)
  - Many combinations of HA and NA proteins are possible (i.e., H5N1, H5N2, H7N2, H7N8, etc).
- AI viruses are also classified into two groups based on their ability to produce disease in chickens: highly pathogenic avian influenza (HPAI) or low pathogenic avian influenza (LPAI).
  - HPAI viruses cause high mortality in poultry and occasionally high death rates in certain species of wild birds.
  - LPAI viruses can cause a variety of outcomes in poultry ranging from no apparent clinical signs to moderate death rates. LPAI viruses usually cause little to no signs in wild birds.
- H5 and H7 LPAI viruses have the potential to mutate or evolve into HPAI viruses and are closely monitored by animal health officials.

PLANET PARADE

⊙ **CONTEXT:** **During the last week of April 2022, a rare and unique planet alignment occured, which is popularly known as 'planet parade'.**

What is Planet Parade?

- Although there is no scientific definition for 'planet parade', it is being widely used in astronomy to denote an event that takes place when planets of the solar system line up in a row in the same area of the sky.

Planets that are lined up:

- Four planets–**Jupiter, Venus, Mars and Saturn** aligned in the same ecliptic plane of our solar system, making them seem as if they are in a straight line across the eastern horizon.
- These planets, though quite far away from each other, were uniquely positioned to appear as if they're in a straight line.
- The alignment, one of the few rare phenomena, was actually be visible to watchers without the need for a telescope or other viewing instrument.

When the planets align?

- Planetary alignments occur when the planets' orbits bring them to the same region of the sky, when viewed from Earth.
- These planetary alignments are not rare, but they're not regularly occurring.
- The last time five planets aligned in the night sky was in 2020, preceded by alignments in 2016 and 2005.

BEL AND HAL SIGN DEAL FOR IRST

⊙ **CONTEXT:** The Hindustan Aeronautics Limited (HAL) and Bharat Electronics Limited (BEL) signed a contract for the co-development and co-production of the Long Range Dual Band Infra-Red Search and Track System (IRST) for the Su-30 MKI under the MAKE-II procedure of Defence Acquisition Procedure (DAP) 2020 as a part of the 'Make in India initiative'.

About Infrared search and track (IRST) systems:

- Infrared search and track (IRST) systems are wide field of view surveillance systems, designed for autonomous search, detection, tracking, classification and prioritization of potential targets, passively.
- The IRST systems are getting more and more importance in air defense applications due to increased reluctance to use radar sensors because of threat of' anti-radiation missiles and dramatic increase in IR sensor performance.
- IRST systems use mid and long-wavelength IR radiation because these occur naturally and are readily transmitted through the atmosphere.
  - The objects in the scene are themselves the source of the radiation.
  - The atmosphere limits the choice of wavelengths for IR systems to certain bands" of the so called near, mid-wave, and longwave IR.

About Hindustan Aeronautics Limited (HAL):

- Hindustan Aeronautics Limited is an Indian state-owned aerospace and defence company headquartered in Bangalore, India.

- **Founded in** 1940.

- It is governed under the management of the **Indian Ministry of Defence.**
- HAL as a strategic reliable partner, has been associating with ISRO for the prestigious space programs since last five decades.
- HAL has supplied critical structures, tankages, satellite structures for the PSLV, GSLV-MkII and GSLV-MkIII launch vehicle.
- Various new projects like PS2/GS2 integration, Semi-Cryo structure fabrication and manufacture of cryo and semi cryo engines are being taken up at HAL, for which setting up of necessary infrastructure and facilities is nearing completion.

About Bharat Electronics Limited (BEL):

- Bharat Electronics Limited (BEL) a Navaratna PSU.
- **Established in:** 1954
- BEL has nine manufacturing units across India.
- The company has core competency in areas of Defence Communications, Radars & Missile Systems, Sonars & Fire Control Systems, Electronic Warfare and Avionics Systems, Network Centric Systems, Electro-Optics, Tank Electronics, Home Land Security etc.

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SECTION: C
(QUICK FACTS)

PM MODI RECEIVES LATA MANGESHKAR AWARD

◉ **CONTEXT:** **Prime Minister Narendra Modi has been honoured with the first-ever Lata Deenanath Mangeshkar Award.**

About the award:

- The award would be given annually to a person who has made **a path-breaking, spectacular and exemplary contribution to the nation and its people.**

- **PM Modi received the award for selfless service to the nation and society.**

  ⊚ The award ceremony held on April 24 which marks the 80th death anniversary of Master Deenanath Mangeshkar (singing legend's father).

- Among the other awardees were **singer Rahul Despande**, who received the Master Deenanath Award besides three other special awardees including veteran actress **Asha Parekh, actor Jackie Shroff** and the Mumbai Dabbawalas, represented by **Nutan Tiffin Suppliers.**

- The award citation praised Mr. Modi, the first recipient, as "an international statesman who has put India on the path of global leadership."

WORLD MALARIA DAY BEING OBSERVED

◉ **CONTEXT:** **World Malaria day is observed on 25th April.**

About World Malaria day:

- It is an occasion to highlight the need for continued investment and sustained political commitment for malaria prevention and control.

- World Malaria Day was instituted by WHO Member States during the World Health Assembly of 2007.

- This year the theme is -Harness innovation to reduce the malaria disease burden and save lives.

About Malaria:

- Malaria is an acute febrile illness.

- **Caused by:** Malaria is caused by Plasmodium.

- The parasites are spread to people through the bites of infected female **Anophelesmosquitoes**, called "malaria vectors."

- There are 5 parasite species that cause malaria in humans, and 2 of these species – falciparumand P. vivax – pose the greatest threat.

- **Symptoms:** The first symptoms – fever, headache, and chills – may be mild and difficult to recognize as malaria.

- **Transmission:** In most cases, malaria is transmitted through the bites of female Anopheles

- Malaria is caused by a Plasmodium Parasites that is transmitted from one human to another by the bite of infected Anopheles mosquitoes.

- In humans, the parasites (called sporozoites) migrate to the liver where they mature and release another form, the merozoites.
- The majority of Malaria symptoms are caused by the massive release of merozoites into the bloodstream such as anaemia is caused by the destruction of the red blood cells.

DOVAL TO LEAD FIRST INTERNATIONAL INTELLIGENCE HEADS' DELHI MEET

⊙ **CONTEXT:** **National Security Advisor Ajit Doval led discussions at India's first conference of intelligence agency chiefs, held in the capital.**

About first conference of intelligence agency chiefs:

- The Conference is modelled on the lines of the **annual Munich Security Conference** and **Singapore's Shangri-La dialogue**.
- It brings together heads and deputy heads of the top intelligence and security organizations from **more than 20 countries** and their allies.
- Intelligence chiefs and deputies from **Australia, Germany, Israel, Singapore, Japan and New Zealand** are among those expected to attend the conference.
- It is being organised by country's external intelligence agency, the Research and Analysis Wing (**R&AW**) and the National Security Council Secretariat (**NSCS**) that reports to National Security Adviser (NSA) Ajit Doval.
- The NSCS conference comes just before the MEA's "flagship conference on geopolitics and geo-economics", the Raisina dialogue, held annually since 2016.
- Intention of the conference is **to make "sustained" plan to make connections between the agencies.**

HOUSEHOLD CONSUMER SPENDING SURVEY TO RESUME IN JULY

⊙ **CONTEXT:** **The All-India Household Consumer Expenditure Survey is set to resume this year after a prolonged break.**

About All-India Household Consumer Expenditure Survey:

- **Conducted by:** National Statistical Office (NSO) every 5 years.
- **Aim:** To collect information on the consumption spending patterns of households across the country, both urban and rural.
- The data gathered in this exercise reveals the average expenditure on goods (food and non-food) and services.
- The data helps to generate estimates of household Monthly Per Capita Consumer Expenditure (MPCE) as well as the distribution of households and persons over the MPCE classes.

Counting the spending | The All-India Households' Consumer
Expenditure Survey will be conducted between July 2022 and June 2023

What is it?
Usually carried out every five years, the survey helps assess poverty levels and consumption patterns across the country, and rebase GDP calculations

What's the big deal? The last survey whose findings were made public was conducted in 2011-12

Why this long pause? A survey was conducted in 2017-18 too, but its results were not released owing to 'quality' concerns. It reportedly reflected the first drop in monthly per capita household spending since 1972-73, with a rise in poverty incidence

FLOUNDERING POLIO ERADICATION

⊙ **CONTEXT:**
The recent news of wild poliovirus type 1 (WPV1) in Malawi imported from Pakistan and of polio outbreak in Israel caused by 'circulating vaccine-derived poliovirus type 3' (cVDPV3) are visible signs of floundering polio eradication.

About Circulating Vaccine-Derived Polioviruses, cVDPV:

- Wild poliovirus (WPV) is the most commonly known form of the poliovirus.
  - ⊙ However, there is another form of polio that can spread within communities: circulating vaccine-derived poliovirus, or cVDPV.
- While cVDPVs are rare, they have been increasing in recent years due to low immunization rates within communities.
  - ⊙ cVDPV type 2 (cVDPV2) are the most prevalent, with 959 cases occurring globally in 2020.
  - ⊙ Notably, since the African Region was declared to have interrupted transmission of the wild poliovirus in August 2020, cVDPV are now the only form of the poliovirus that affects the African Region.

48TH ALL INDIA POLICE SCIENCE CONGRESS

⊙ **CONTEXT:**
Union Home Minister Amit Shah addressed the inaugural session of the 48th All India Police Science Congress in Bhopal.

What is All India Police Science Congress (AIPSC)?

- All India Police Science Congress (AIPSC) is organized annually by rotation in different States / UTs.
- The Police Science Congress is the ideal forum to discuss and work out a common strategy and coordination, the meetings of which are held under the aegis of BPR&D.
- **Aim:**
  - ⊙ to provide useful and informal forum for in –depth discussion on various aspects of Police functioning
  - ⊙ to encourage creative thinking/ ideas amongst the Police Officers, Social Scientists, Forensic Scientists and Experts from police subjects relating to Police Administration/ Criminology/ Police Science/ Forensic Science/ Forensic Medicine/ Cyber Crime, Law etc.

The first AIPSC was held at Patna in 1960.

ASIA'S BIGGEST INTERNATIONAL FOOD AND HOSPITALITY FAIR - AAHAR 2022 BEGINS TODAY IN NEW DELHI
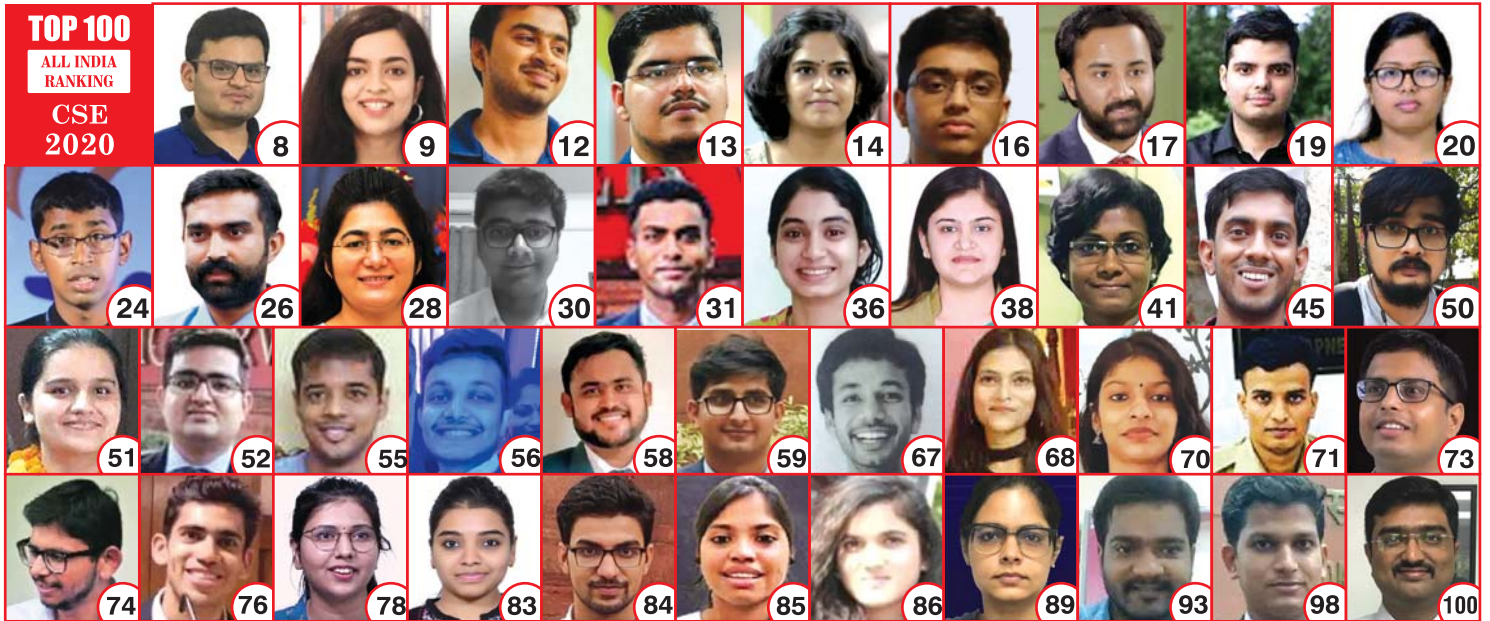
⊙ **CONTEXT:** **Agricultural and Processed Food Products Export Development Authority (APEDA) in association with the India Trade Promotion Organization (ITPO) organised Asia's biggest international food and hospitality fair AAHAR 2022 at Pragati Maidan in New Delhi.**

About AAHAR 2022:

- This is the 36th edition of AAHAR.

- **Theme:** "Geographical Indication Products". APEDA is focussing on promotion of exports of GI certified agricultural products.

- AAHAR is a part of the series of **export promotion initiatives** taken by **APEDA** to showcase agricultural and processed food products to the global players in the food and beverages industry as the fair is visited by a large number of importers from different parts of the world.

  ⊙ **APEDA** works under the **Ministry of Commerce and Trade.**

- More than 80 exporters form different segments of agricultural products, which include GI products, processed food, organic, frozen food products, millets, etc, participated under APEDA pavilion.

- **Products:** At the fair, products ranging from Ready to Eat (RTE), Ready to Serve (RTS), Ready to Consume (RTC), plant-based meat products, dehydrated products, chocolate, grains, frozen food, herbal products, juices, honey, dairy products, etc were showcased by Indian manufacturers for the importers from several leading countries.

Others

- Apart from AAHAR, APEDA also organizes national events to promote agri-exports, like:

  ⊙ Organic World Congress

  ⊙ BioFach India etc to promote agri-exports

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