FWD

FORTUNE WEEKLY DIGEST

FORTUNE IAS ACADEMY · FORTUNE IAS ACADEMY
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"Achieve your Dreams with Fortune"

> Tsunami Preparedness   > Medong Hydropower Project   > ISFR 2023

FWD
FORTUNE WEEKLY DIGEST

EDITOR'S NOTE

As UPSC aspirants, it is essential to stay updated on current affairs to excel in the examination. This **Fortune Weekly Digest (ForWarD)** brings you the latest news and developments from around the world, carefully curated and analyzed to help you prepare for the Civil Services (Main) Examination.

We understand that time is precious, and we have made sure to present the information in a concise and easy-to-understand manner.

The magazine is divided into different sections. Mains relevant topics have been covered in detail with a UPSC previous year question perspective. The jot downs are examples and interesting facts to enrich your answer writing. Cherrypicks has some key words from the week, helpful again in answer writing and essay. We have also included essay topics and sample questions to help you guage your preparation.

We have designed this magazine to best supplement the daily current affairs notes we have launched by the name of **FIND (Fortune IAS News Daily)** and **FINDER (Fortune IAS News Daily Explainer)** and the **Fortune Prelims Precise** monthly compilation. This magazine will be explained in detail and your queries addressed in a live class we conduct.

At a time when there is no dearth of current affairs materials, our hope is help you get a one-stop solution for all your current affairs needs.

This magazine is a work in progress and your feedback will be appreciated.

We hope that this magazine will serve as a valuable resource for your exam preparation and contribute to your success in the UPSC examination.

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KASTURI SHA AIR 68

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CHINA'S MEDONG HYDROPOWER PROJECT

> *Syllabus: GS II - India and its neighborhood- relations*

PYQ MAPPING

Q) What do you understand by run of the river hydroelectricity project? How is it different from any other hydroelectricity project?**(2013)**

SHORT TAKES

➢ **Three Gorges Dam:** A hydroelectric gravity dam spanning the Yangtze River in Hubei province, China. It is the world's largest power station by installed capacity, generating 22,500 megawatts of electricity.

➢ **Principle of prior appropriation:** A water rights doctrine stating that the first person or entity to use a water resource for a beneficial purpose has the right to continue using that amount of water, provided it is used efficiently and without waste.

WHY IN NEWS

China has approved the construction of the **world's largest hydropower project on the Brahmaputra River in Tibet**, near the Indian border, at an estimated cost of $137 billion. This has raised concerns in downstream riparian states like India and Bangladesh over environmental, geopolitical, and water-sharing impacts.

INTRODUCTION

The construction of large dams, such as those on the Yarlung Tsangpo, highlights the complex interplay between energy needs and environmental sustainability particularly in trans-boundary river basins like the Brahmaputra. These projects not only promise economic and strategic gains but also pose significant risks to ecological balance and regional stability.
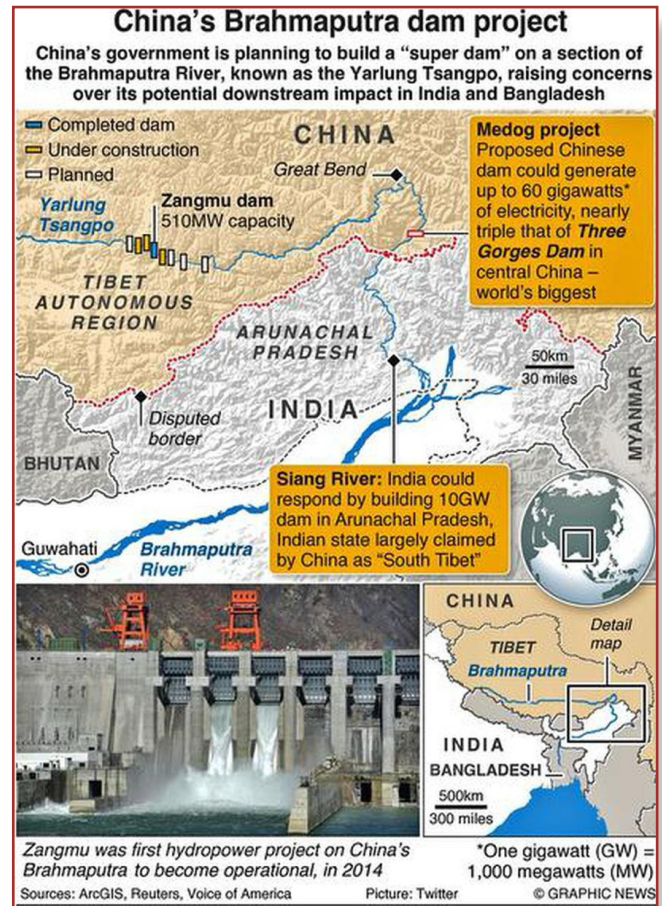
River Brahmaputra

• **Origin and Course**: The Brahmaputra, known as **Yarlung Tsangpo** at its origin, begins from the Chemayungdung Glacier in Tibet, flows eastward, and takes a U-turn at Namche Barwa in Arunachal Pradesh, becoming the **Siang**.

• **Cultural Significance:** Revered by Hindus, Jains, and Buddhists, it is mythologically linked to **Brahma** and the **Bodhisattva**.

• **Economic and Ecological Role**: It supports livelihoods, aids navigation, and sustains biodiversity in National Parks like **Kaziranga and Manas.**

ABOUT THE PROJECT

➡ **Project Approval:** China approved a massive hydropower project on the **Yarlung Tsangpo River (Brahmaputra)** near the Indian border on December 25, 2024.

➡ **Location and Scale**:

o The dam will be built in **Medog County, Tibet**, where the Yarlung Tsangpo (Brahmaputra) River **drops by 2,000 metres**, ideal for hydropower generation.

o With an **estimated cost of over $137 billion**, the project will surpass the Three Gorges Dam as the world's largest infrastructure project.

➡ **Capacity:**

o Expected to generate up to three times the capacity of the Three Gorges Dam, the world's largest hydropower project currently.

o Annual electricity generation is projected at **300 billion kWh**, sufficient for over 300 million people.

➡ **Purpose**:

o Part of China's renewable energy initiatives to achieve **carbon neutrality by 2060**.

o Aims to promote development in the Tibet Autonomous Region.

➡ **Existing Infrastructure**:

o Since 2010, China has built smaller dams along the Yarlung Tsangpo, with two completed and at least three under construction.

• China operationalised the $1.5 billion **Zam or Zangmu Hydropower Station**, Tibet's largest, in 2015.

➡ **Strategic Planning:** The project is part of China's **14th Five-Year Plan (2021-2025)** and its long-term development goals outlined by the Communist Party of China in 2020.

IMPLICATIONS

- **Agriculture:** The dam could **trap massive amounts of silt**, reducing the fertility of downstream soil and adversely affecting farming in India.

- **Water Resources:** Potential reduction in water flow during the dry season could impact downstream areas, while sudden water releases during monsoons may exacerbate flooding in Assam.

- **Water as a Weapon:** China's control over the river flow gives it leverage, with past instances of **withholding hydrological data during the 2017 Doklam standoff** raising concerns about future reliability.

- **Seismological Impact:** The Himalayan region's seismic vulnerability heightens the risk of catastrophic damage from large-scale infrastructure projects like the dam.

- **Ecological Impact:** The dam threatens the fragile Himalayan ecosystem, endangering biodiversity, accelerating deforestation, and exacerbating soil erosion and glacier retreat.

- **Geopolitical Concerns**: The dam's location near the Indian border raises concerns about **China's unilateral control over trans-border rivers**, impacting downstream riparian states like India and Bangladesh.

China's Brahmaputra dam project

China's government is planning to build a "super dam" on a section of the Brahmaputra River, known as the Yarlung Tsangpo, raising concerns over its potential downstream impact in India and Bangladesh

Medog project Proposed Chinese dam could generate up to 60 gigawatts* of electricity, nearly triple that of *Three Gorges Dam* in central China – world's biggest

Siang River: India could respond by building 10GW dam in Arunachal Pradesh, Indian state largely claimed by China as "South Tibet"

Zangmu was first hydropower project on China's Brahmaputra to become operational, in 2014

*One gigawatt (GW) = 1,000 megawatts (MW)

Sources: ArcGIS, Reuters, Voice of America   Picture: Twitter   © GRAPHIC NEWS

INDIA'S REACTION

- **Engagement through ELM**:
  - India and China established the Expert Level Mechanism (ELM) in 2006 to discuss trans-border river issues, with China sharing hydrological data on the Brahmaputra and Sutlej rivers

  - Recent talks between NSA Ajit Doval and Chinese Foreign Minister Wang Yi on December 18, 2024, emphasized positive directions for cooperation, including continued data sharing on these rivers.

- **Monitoring Developments**: India is closely observing the project's progress and potential impact on water flow and regional stability.

- **Appeal to China:** India has urged China to ensure that its upstream activities on the Brahmaputra do not harm the interests of downstream states like India and Bangladesh.

- **Proposed Hydropower Project:** The **Siang Upper Multipurpose Project (SUMP)**, India's largest proposed hydropower initiative, aims to **generate**

The dam is set to be built at a huge gorge in the Himalayan reaches where the Brahmaputra River makes a huge U-turn to flow into Arunachal Pradesh and then to Bangladesh

11,000 MW by harnessing the Siang River's potential, with a **reservoir capacity of 9 billion cubic meters**, and is designed to counter China's upstream dam-building activities.

- **Other Projects in North East:**
  - India has **constructed** hydropower projects such as the **Teesta Stage III and Stage V dams** on the **Teesta River** in Sikkim, which eventually flows into Bangladesh.

  - India has **proposed** the **Tipaimukh Dam** on the transboundary **Barak River** in Manipur, which has sparked controversy over its potential impact on water flow to Bangladesh.

WAY FORWARD

- **Strengthen Bilateral Mechanisms**: Enhance transparency and trust through improved data-sharing agreements and joint river management frameworks.
  - o **Examples of Data Sharing Agreements**:
    - **Brahmaputra MoU with China**: Signed in 2002 and renewed until 2018, it facilitates China's monsoon data sharing with India; renewal is pending since June 2023.
    - **Sutlej MoU with China**: Initiated in 2005 for flood control, it was renewed in 2010 and 2015; China provided data in 2021 despite pending renewal.
    - **Flood Forecasting Data Transmission System with Bangladesh**: Enables sharing of real-time flood data for rivers like Ganga, Teesta, Brahmaputra, and Barak.

- **Leverage International Platforms**: Engage global institutions to advocate for equitable water-sharing principles under international law.
  - o **Example**:
    - The **Indus Waters Treaty**, signed in 1960 with the **World Bank's mediation**, allocates the Western Rivers (Indus, Jhelum, Chenab) to Pakistan and the Eastern Rivers (Ravi, Beas, Sutlej) to India

- The **Transboundary Water Cooperation Coalition**, launched at UNESCO on 8 December 2022, promotes equitable governance of shared aquifers, lakes, and rivers for sustainable development.

- India is not a member.

- **Sustainable Development Advocacy**: Urge China to adhere to international environmental and ecological standards while pursuing the project.

- **Strategic Planning:** Define clear goals and strategic outcomes for addressing potential water conflicts with China on the Brahmaputra.

- **Strengthen Ties with Bangladesh:** Prioritise enhancing relations with Bangladesh by finalising the Teesta River agreement and demonstrating responsibility as an upper riparian state.

- **Assertive Negotiations with China:** Adopt a firm and proactive stance in water rights discussions with China, mirroring the assertiveness shown during the Doklam stand-off and in opposing the Belt and Road Initiative.

- **Proactive Infrastructure Development:** Expedite the construction of hydropower projects on the Brahmaputra to secure water resources and strengthen India's legal standing under the **principle of 'prior appropriation**.'

CONCLUSION

To address the challenges posed by large dam constructions, nations must prioritise sustainable development and equitable water-sharing agreements ensuring that progress does not come at the cost of ecological and human welfare. A balanced approach can transform water conflicts into opportunities for regional cooperation and mutual growth.

SAMPLE QUESTION

Q) Examine the strategic implications of water resource control, with a focus on China's hydropower ambitions and their impact on India's strategic interests. **(10marks)(150 words)**

INDIA STATE OF FOREST REPORT (ISFR) 2023

"We are blessed to be a part of a culture where living in complete harmony with the environment is central to our ethos. Let's ensure that even the smallest step we take in our daily lives will be an effort towards conserving nature and natural resources."
- Prime Minister Narendra Modi

Syllabus: GS III - Environmental Conservation

PYQ MAPPING

Q) *Discuss the causes of depletion of mangroves and explain their importance in maintaining coastal ecology* **(2019)**

Q) *Examine the status of forest resources of India and its resultant impact on climate change* **(2020)**

INTRODUCTION

Forests are crucial in mitigating climate change, preserving biodiversity, and ensuring clean air and water. In India, the latest Forest Report highlights significant progress in expanding forest and tree cover, demonstrating the country's commitment to balancing development with environmental sustainability.

WHY IN NEWS

The **18th biennial State of Forest Report (ISFR-2023)** was released by Minister for Environment, Forest and Climate Change Bhupender Yadav on December 21 at the Forest Research Institute in Dehradun.

2023
India State of Forest Report (ISFR)

SHORT TAKES

➤ **Forest Survey of India (FSI):** Established under the Ministry of Environment & Forests, conducts forest resource surveys and assessments across the country. Established in 1965 as the Pre-Investment Survey of Forest Resources (PISFR) under a FAO/UNDP/GOI project, it was reorganized as FSI in 1981 to expand its scope.

➤ **National Forest Inventory:** A comprehensive system of data collection and analysis designed to assess forest resources, including growing stock, area statistics, and ecological parameters, on a national scale.

➤ **Growing stock:** Refers to the total volume of living trees in a forest, including above-ground biomass (trunk, branches, foliage) and sometimes below-ground biomass. It indicates forest health, productivity, and timber potential.

ABOUT INDIA STATE OF FOREST REPORT (ISFR)

➡ ISFR is a **biennial publication by the Forest Survey of India (FSI)**, under the Ministry of Environment, Forest & Climate Change, released since 1987.

➡ Green cover data is estimated using the **Resourcesat** series of satellites by ISRO and field-based **National Forest Inventory.**

➡ The India State of Forest Report 2023 is the **18th in the series**, showcasing continuous monitoring of forest and tree cover in India.

➡ The report is published in two volumes:

o **Volume-I:** National-level assessment covering forest cover, mangrove cover, forest fires, growing stock, carbon stock, agroforestry, forest characteristics, and decadal changes.

o **Volume-II:** Detailed data on forest cover and field inventory for each State/UT, including district and forest division-wise data.

➡ **Policy Benchmark:** The National Forest Policy, 1988, mandates **33%** of geographical area under forest and tree cover

KEY FINDINGS OF ISFR 2023

◉ **Forest and Tree Cover**:

o **Total area:** 8,27,356.95 km² (25.17% of the country's geographical area).

o **Forest cover:** 7,15,342.61 km² (21.76%).

o **Tree cover:** 1,12,014.34 km² (3.41%).

- **Forest Cover**: Defined by the Forest Survey of India (FSI) as land with a tree canopy density exceeding 10% and covering at least one hectare, including plantations.

- **Tree Cover**: Refers to trees outside forests that occupy less than one hectare and lie outside Reserved Forest Areas, with bamboo cover also included.

◉ **Increase in Forest and Tree Cover:** An increase of 1,445.81 sq km in forest and tree cover since 2021, with 156.41 sq km in forest cover and 1,289 sq km in tree cover.

o From 2013 to 2023, the forest cover growth rose by 0.53 percentage points from 21.23% to 21.76%.

o Tree cover has shown the sharpest growth, increasing from 2.91% in 2021 to 3.41% in 2023.

◉ **Loss of Dense Forests**: A significant loss of 3,913 sq km of dense forests occurred between 2021 and 2023, consistent with the long-term trend of forest degradation.

◉ **States with Largest Forest and Tree Cover**:

1. Madhya Pradesh (85,724 sq km)

2. Arunachal Pradesh (67,083 sq km)

3. Maharashtra (65,383 sq km)

◉ **States with Largest Forest Cover**:

1. Madhya Pradesh (77,073 sq km).

2. Arunachal Pradesh (65,882 km)

3. Chhattisgarh (55,812 sq km)

◉ **States with Highest Percentage of Forest Cover**:

1. Lakshadweep: 91.33%.

2. Mizoram: 85.34%.

3. Andaman & Nicobar Islands: 81.62%.

◉ **Top States with Maximum Increase (Forest and Tree Cover)**:

1. Chhattisgarh: +684 km².

2. Uttar Pradesh: +559 km².

3. Odisha: +559 km².

4. Rajasthan: +394 km².

◉ **Top States with Maximum Increase in Forest Cover**:

1. Mizoram: +242 km².

2. Gujarat: +180 km².

3. Odisha: +152 km².

◉ **Top States with Maximum Decrease (Forest and Tree Cover)**:

1. Madhya Pradesh (612.41sq km)

2. Karnataka (459.36 sq km)

3. Ladakh (159.26 sq km)

4. Nagaland (125.22 sq km)

◉ **Western Ghats Eco-Sensitive Areas (WGESA)**:

o **Area**: 60,285.61 km².

o **Forest cover**: 44,043.99 km² (73% of the area).

o **Decadal forest cover loss**: 58.22 km², with a decrease in Moderately Dense Forest and Open Forest by 3,523.34 km². Very Dense Forest increased by 3,465.12 km².

◉ **Forest Cover in Hill Districts**:

o Total forest cover: 2,83,713.20 km² (40% of the total geographical area of hill districts).

o Forest cover increase: 234.14 km².

◉ **Forest Cover in North Eastern Region**:

o Occupies **<8% of India's land area** but holds **>21% of tree and forest cover**.

o Total forest and tree cover: 1,74,394.70 km² (67% of the geographical area).

o Forest cover decrease: 327.30 km².

◉ **Fire Incidences**:

o Fire hotspots detected: 2,03,544 (compared to 2,23,333 in 2021-22 and 2,12,249 in 2022-23).

o Top states with fire incidences: Uttarakhand, Odisha, and Chhattisgarh.

EXPANSION OF FOREST COVER — 698,712 KM² (2013) → 715,343 KM² (2023). DECLINE IN FIRE INCIDENTS — 223,333 (FIRE HOTSPOTS IN 2021–22) → 203,544 (FIRE HOTSPOTS IN 2023–24). SOURCE: INDIA STATE OF FOREST REPORT (ISFR) 2023

◉ **Bamboo Bearing Area:**

o Total bamboo area: 1,54,670 km².

o Increase: 5,227 km²

o Maximum bamboo area in Madhya Pradesh (20,421 km²), followed by Arunachal Pradesh (18,424 km²).

Mangrove Cover:

o Total mangrove cover: 4,991.68 km² (0.15% of the country's total geographical area).

o Net decrease in mangrove cover: 7.43 km².

o Andhra Pradesh and Maharashtra increased mangrove cover.

o Gujarat's Kutch region reported a significant decrease.

Growing Stock:

o **Total growing stock:** 6,429.64 million m³

o **Inside forests:** 4,478.89 million m³

o **Outside forests:** 1,950.75 million m³

o **Total increase:** 262.32 million m³ (4.25%).

Forest Volume Contribution:

o **Inside Forests**:

- Shorea robusta: 11.43%.

- Tectona grandis: 4.46%.

- Pinus roxburghii: 4.43%.

- Terminalia tomentosa: 3.59%.

o **Trees Outside Forests (TOF)**:

- Mangifera indica: 13.25%.

- Azadirachta indica: 7.00%.

- Madhuca species: 4.37%.

- Cocos nucifera: 4.16%.

Agroforestry:

o Total tree green cover under agroforestry: 1,27,590.05 km² (increase of 21,286.57 km², 20.02% from ISFR 2013)

Carbon Stock: Total carbon stock estimated at 7,285.5 million tonnes, with an increase of 81.5 million tonnes.

ISSUES

- **Definition of Forests**: Inconsistent definitions include commercial plantations and orchards while excluding community forests, undermining ecological integrity.

- **Plantation Concerns**: Plantations, lacking the ecological value of natural forests, are often homogeneous in species and age, vulnerable to pests, fire, and do not support biodiversity as natural forests do.

- **Shrinking Forest Types**: While very dense forests grew by 3,465.12 sq. km, moderately dense and open forests shrank by over 3,500 sq. km combined.

Carbon Sequestration Target:

Key Highlights from

India State of Forest Report 2023

India's Progress on NDC Carbon Sequestration Target

> India's carbon stock has reached **30.43 billion tonnes** of CO_2 equivalent

> India has reached **2.29 billion tonnes** of additional carbon sink as against the target of **2.5 to 3.0 billion tonnes** by 2030 compared to the base year of 2005

Loss in Biodiverse Regions: Forest cover losses were observed in the Western Ghats, Eastern States, and Northeast, which are ecologically sensitive and biodiverse areas.

Forest Classification and Changes

CHANGE IN DENSE FOREST COVER 2003-2023

	2021-23	2003-2013	2013-2023	2003-2023
LOST				
VDF to NF	295	288	1277	1565
MDF to NF	3362	6714	15086	21800
VDF to scrub	24	5	65	70
MDF to scrub	313	144	1153	1297
Disappeared	**3994**	**7151**	**17581**	**24732**
VDF to OF	228	134	1128	1262
MDF to OF	5166	6414	22249	28663
Total loss	**9388**	**13699**	**40958**	**54657**
GAINED				
NF to VDF	56	43	483	526
NF to MDF	839	3631	7554	11185
Scub to VDF	1	0	54	54
Scrub to MDF	102	105	1043	1148
OF to VDF	496	124	2567	2691
Plantations	**1494**	**3903**	**11701**	**15604**
OF to MDF	8610	6122	34301	40423
Total gain	**10104**	**10025**	**46002**	**56027**
NET CHANGE	**716**	**-3674**	**5044**	**1370**

VDF: Very Dense Forest (canopy over 70%) | **MDF:** Moderate Dense Forest (canopy 40-70%)
OF: Open Forest (canopy 10-40%) | **Shrub** (canopy under 10%) | **NF:** Non-Forest (no canopy)

Forest (Conservation) Amendment Act 2023: The amendment has been criticised for excluding "deemed" and "community" forests from the purview of the Forest (Conservation) Act 1980, weakening conservation efforts.

- **Quality vs Quantity**: Focus on forest cover increase neglects quality, with **young or non-native trees in unsuitable areas** contributing little to carbon sequestration.

- **Carbon Stock Issues**: Natural forests store more carbon than plantations. The UNFCCC raised concerns about India's assumption that plantations can match the carbon stock of natural forests in just eight years.

  o While India aims to increase carbon stock by 2.5–3 billion tonnes by 2030, only 81.5 million tonnes were added from 2021–2023.

- **Environmental Concerns**: Critics argue that the changes to the Forest (Conservation) Act could hinder long-term forest management and biodiversity conservation in India.

- **Resource Deficiency**: Reports highlight a lack of human resources, skills, and equipment to manage forest fires effectively.

- **Lack of Ecological Indicators**: Missing data on forest fragmentation, biodiversity, and ecosystem degradation limits assessment of ecological impact.

SCHEMES AND INITIATIVES FOR FOREST PROTECTION AND MANAGEMENT

Green India Mission (GIM):

o Launched in February 2014 to enhance forest cover through protection, restoration, and expansion, with Rs. 944.48 crore allocated to 17 States and 1 Union Territory for plantation and eco-restoration.

School Nursery Yojana (SNY):

o Encourages tree planting in schools to raise awareness, with Rs. 4.80 crore allocated for 743 projects in 19 States/UTs.

Nagar Van Yojana (NVY):

o Established in 2020, focuses on developing green spaces in urban and peri-urban areas, with Rs. 431.77 crore allocated for 546 projects across 31 States/UTs.

Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI):

o A five-year initiative (2023-2028) to restore and promote mangroves along India's coastline, with Rs. 17.96 crore allocated to key states and UTs.

Ek Ped Maa Ke Naam:

o Launched on 5th June 2024, encourages citizens to plant trees in honor of mothers, fostering a connection between nature and nurturing.

Compensatory Afforestation Fund (CAMPA):

o Fund used for compensatory afforestation to offset forest and tree cover loss due to developmental projects.

o Rs. 55,394.16 Crore released to State/UT Forest Departments over five years.

National Action Plan on Forest Fire-2018:

o Provides measures to prevent forest fires and build resilience through community capacity building for fire control.

Joint Forest Management and Eco Development Committees:

o Promotes community involvement in forest and wildlife protection, in line with the National Forest Policy of 1988, ensuring local participation in conservation activities.

Other Afforestation Programs:

o Afforestation under various schemes like Mahatma Gandhi National Rural Employment Guarantee Scheme, National Bamboo Mission, and Sub-Mission on Agroforestry.

WAY FORWARD FOR SUSTAINABLE FOREST MANAGEMENT

- **Redefine Forests with Ecological Integrity**: Adopt a consistent and ecologically sound definition of forests that **excludes commercial plantations** and prioritises natural and community forests.

- **Promote Natural Forest Restoration**: Focus on restoring degraded natural forests instead of relying on monoculture plantations to enhance biodiversity and carbon sequestration.

  o **Example**: Jadav Payeng, the "Forest Man of India," transformed a barren sandbar in Assam into a 550-hectare forest, showcasing the power of natural restoration.

- **Strengthen Forest Conservation Laws**: Revise the Forest (Conservation) Amendment Act 2023 to include community and "deemed" forests under its purview to ensure comprehensive protection.

- **Enhance Monitoring and Data Transparency**: Develop robust mechanisms for transparent forest data reporting, distinguishing between natural forests and plantations to avoid overstated growth.

✳ **Address Biodiversity Loss**: Prioritise conservation in ecologically sensitive regions like the Western Ghats and Northeast by implementing region-specific management plans.

✳ **Invest in Forest Fire Management**: Allocate resources for modern equipment, training, and technology to effectively prevent and manage forest fires.

✳ **Encourage Community Participation**: Strengthen participatory forest management models to involve local communities in conservation and decision-making processes.

✳ **Capacity Building and Research**: Invest in research on biodiversity, carbon sequestration, and sustainable forest management practices to guide policy decisions.

o **Example**: Institutions like the **Indian Council of Forestry Research and Education (ICFRE)** conduct research on various aspects of forestry.

CONCLUSION

Effective forest management demands a nuanced approach that goes beyond numbers, focusing on preserving natural ecosystems, enhancing biodiversity, and involving local communities. The ISFR can play a pivotal role in guiding policies that integrate ecological sustainability with developmental imperatives.

SAMPLE QUESTION

Q) Despite an increase in overall forest cover, India has witnessed significant losses in dense forest areas. Analyse the reasons behind this trend and its impact on biodiversity and ecological balance **(10marks)(150 words)**

WEALTH TAX IN INDIA

Syllabus: GS III - Indian Economy

PYQ MAPPING

Q) *Comment on the important changes introduced in respect of the Long-term Capital Gains Tax (LCGT) and Dividend Distribution Tax (DDT) in the Union Budget for 2018-2019.* **(2018, 10 marks)**

Q) *Enumerate the indirect taxes which have been subsumed in the Goods and Services Tax (GST) in India. Also, comment on the revenue implications of the GST introduced in India since July 2017* **(2019, 10 marks)**

Q) *Explain the rationale behind the Goods and Services Tax (Compensation to States) Act of 2017. How has COVID-19 impacted the GST compensation fund and created new federal tensions?* **(2020, 15 Marks)**

INTRODUCTION

- A wealth tax is a direct tax imposed on the net wealth of individuals, households, or entities. It targets the value of assets owned, such as real estate, stocks, bonds, cash, and other forms of property, after deducting liabilities like loans or debts.

- Its main purpose is to reduce economic inequality by redistributing wealth and to generate revenue for public welfare programs such as healthcare and education.

WHY IN NEWS

French economist Thomas Piketty suggested imposing a wealth and inheritance tax on India's super-rich to fund health and education, while India's **Chief Economic Advisor (CEA),** Anantha Nageswaran opposed it, citing risks of capital flight.

HISTORY

- **Switzerland:**
  - Wealth taxation has its roots in the 19th century, with Basel City in Switzerland introducing the tax as early as **1840**.

- **Other Countries:**
  - Several nations adopted wealth taxes later, including:
    - The **Netherlands** in **1892**.
    - **Sweden** in **1911**.

- **India:**
  - India introduced a wealth tax in **1957**, spearheaded by then Finance Minister **T.T. Krishnamachari**.

- **Decline in Adoption:**
  - Over the years, wealth taxes have become less common globally.
  - Among **OECD countries**, the number implementing the tax dropped from **12 in 1990** to just **4 in 2017**.

WEALTH TAX IN INDIA

- **Introduction of Wealth Tax:**
  - Enacted in **1957** under the **Wealth Tax Act**, based on the recommendations of the **Kaldor Committee (1955)**, to streamline India's tax system.
  - A **1% tax** was levied annually on net wealth exceeding ₹30 lakh, applicable to **individuals**, **Hindu Undivided Families (HUFs)**, and **companies**.

- **Abolition of Wealth Tax:**
  - The tax was **abolished in 2015**, primarily due to:
    - Widespread **litigation**.
    - **High compliance costs** for taxpayers.
    - **Substantial administrative expenses** for the government.

- **Replacement Measures:**
  - To compensate for the revenue loss, the government increased **surcharges on the super-rich**:
    - **Individuals:** Surcharge raised from **2% to 12%** for those with annual incomes over ₹1 crore.
    - **Companies:** Surcharge increased from **2% to 12%** for firms earning over ₹10 crore annually.

WHY THOMAS PIKETTY ADVOCATES WEALTH TAX IN INDIA?

➡ **Inequality in India:**

o Thomas Piketty and co-authors highlight a sharp increase in inequality, especially post 2014-15.

o 2022-23 estimates:

- Top 1% of Indians hold 22.6% of income and 40.1% of wealth.

- This is higher than inequality levels in South Africa, Brazil, and the US.

➡ **Economic Contrast:**

o The top 1% have amassed significant gains, while those at the bottom depend on state programs like:

- Free/subsidized food grains under welfare schemes.

- MGNREGA for employment opportunities.

➡ This stark contrast highlights the potential fairness and necessity of taxing the super-rich to address inequality.

ARGUMENTS FOR IMPLEMENTING WEALTH TAX IN INDIA

✓ **Addressing Inequality:**

o High wealth concentration limits opportunities and capabilities for a majority of the population.

o Taxing the wealthiest **0.04%** could generate significant funds for **healthcare** and **education**, fostering a healthier and more skilled workforce.

o Supports development goals without increasing debt or fiscal deficits.

✓ **Tax Evasion by Billionaires:**

o The **Global Tax Evasion Report 2024**, prepared by researchers at the **EU Tax Observatory**, reveals that global billionaires benefit from extraordinarily low effective tax rates, ranging from **0% to 0.5%** of their wealth.

✓ **Developmental Benefits:**

o Revenues from a wealth tax can be allocated to critical social sectors such as **healthcare** and **education**, driving equitable growth.

o Encourages a more **balanced distribution of resources**, contributing to a fairer society.

✓ **Feasibility in India:**

o India's advanced **digital infrastructure** and **tax databases** provide the tools needed to track and tax wealth effectively.

o With appropriate policies and institutional frameworks, a wealth tax can be efficiently implemented.

ARGUMENTS AGAINST WEALTH TAX

✗ **Challenges in Defining and Measuring Wealth:**

o Accurately defining and assessing wealth is complex.

o Taxing liquid assets may encourage individuals to shift to less productive assets like **real estate** and **gold**, reducing economic efficiency.

✗ **Lessons from past**

o Past wealth tax implementations in India yielded minimal revenue, contributing less than **1% of total tax collections**. The high **administrative costs** and difficulties in **enforcement** ultimately led to its **abolition** in **2016-17**.

✗ **Risk of Capital Flight:**

o High wealth taxes could prompt the wealthy to relocate their assets or businesses to other countries, harming India's **long-term economic potential**.

✗ **Limitations of Redistributive Taxes**

o Evidence suggests that redistribution through

wealth taxes has limited success in significantly improving well-being indicators in many countries.

o Economic growth, rather than redistribution, has a greater impact on addressing issues like **infant mortality** and **female empowerment**.

✗ **Implementation Difficulties:**

o **Tax evasion** is a major concern, with wealth often being hidden or transferred through proxies.

o Existing data collection systems and surveys often fail to accurately capture the true wealth of the ultra-rich.

✗ **Public Finance Considerations:**

o Effective public finance principles advocate separating **revenue generation** from **expenditure needs**.

o Public goods like education and healthcare are better funded through efficient and proven taxation mechanisms such as **personal income tax**, **GST**, and **property taxes**, rather than relying on a wealth tax.

WHY THERE IS A NEED FOR TAX REFORM IN INDIA?

☼ **Tax Collection and GDP:**

o Union Budget 2024-25 estimates Centre's tax-to-GDP ratio at **11.78%**, with direct taxes contributing **7%**.

o Including states and local bodies, the total tax-to-GDP ratio is around **17%**, much lower than in most countries.

o Low tax-to-GDP ratio limits spending on **social sectors** like education and health, reducing **productivity and incomes**, and weakening demand and growth.

☼ **Inequality and Black Income:**

o Oxfam estimates:

• Top **1%** earn **22%** of national income.

• Top **5%** may earn **40%** of national income.

o At a 25% average tax rate, the top 5% could contribute **10% of GDP** in income taxes.

o Black income generation by the top **3%** further reduces potential tax collection.

☼ **Tax Base Issues:**

o India has **90 million taxpayers** (6.5% of the population), but only **15 million effective taxpayers**.

o Half of taxpayers file **nil returns**, and many pay negligible tax.

o The tax base remains narrow, with **high income inequality**.

☼ **Challenges in Taxation:**

o **Agricultural income:** Even if taxed, it won't significantly expand the tax base.

o **Services sector:** Dominates the economy but is under-taxed, presenting a major challenge for broadening the tax net.

GLOBAL BEST PRACTICES

◉ **New Zealand** and **Denmark** ensure **transparency** in income reporting and tax systems, with publicly available data to track tax collection and distribution, fostering trust in the system.

◉ **Norway** and **Sweden** have successfully implemented **progressive wealth and income taxes**, ensuring the rich contribute proportionally more to national revenues, while maintaining strong public services like healthcare and education.

WAY FORWARD

✳ **Broaden the Tax Base:**

o Improve **tax compliance** through digital systems and formalize sectors like agriculture and services to include more taxpayers.

✳ **Progressive Taxation to Address Inequality:**

o Implement **higher taxes** on the wealthiest individuals, and target **black income** generation to reduce income disparity.

✳ **Enhance Tax Administration:**

o Invest in **digital infrastructure** and enforce

stronger **tax evasion penalties** to increase efficiency and transparency.

✳ **Increase Social Sector Investments:**

o Use **higher tax revenues** to boost public spending on **education, health, and infrastructure** for inclusive growth.

✳ **Incentivize Compliance:**

o Offer **tax incentives** for compliant taxpayers and simplify processes for **small businesses** to encourage voluntary participation.

CONCLUSION

India's past experience with wealth tax, which was abolished in 2015 due to low revenue, high compliance costs, and administrative challenges, offers valuable lessons. However, with advancements in **digital systems** and **data transparency**, a modernized wealth tax could address inequality effectively. By focusing on **progressive taxation**, improving **tax compliance**, and learning from global best practices, wealth tax could become a viable tool for funding social services and reducing inequality in India, provided it is implemented efficiently and inclusively.

SAMPLE QUESTION

Q) Examine the feasibility of reintroducing wealth tax in India. How can modern technology and global best practices address these issues? **(10marks)(150 words)**

TSUNAMI PREPAREDNESS

Syllabus: GS III - Disaster Management

PYQ MAPPING

Q) *On December 2004, tsunami brought havoc on 14 countries including India. Discuss the factors responsible for the occurrence of Tsunami and its effects on life and economy. In the light of guidelines of NDMA (2010) describe the mechanisms for preparedness to reduce the risk during such events.* **(2017, 15 marks)**

Q) *Discuss the recent measures initiated in disaster management by the Government of India departing from the earlier reactive approach.* **(2020, 15 Marks)**

Q) *Explain the causes and effects of coastal erosion in India. What are the available coastal management techniques for combating the hazard?* **(2022, 15 marks)**

INTRODUCTION

A tsunami is a series of powerful ocean waves triggered by sudden large-scale disruptions, commonly caused by underwater earthquakes, but also linked to landslides, volcanic eruptions, weather anomalies, and meteorite impacts.

WHY IN NEWS

December 26, 2024, marks 20 years since the 2004 Indian Ocean tsunami, triggered by a magnitude 9.1 Sumatra earthquake, reshaping tsunami science and disaster preparedness.

SHORT TAKES

➢ **Disaster Management Act of 2005**

o It was introduced after the 2004 tsunami to establish a comprehensive disaster management system in India.

o Managed by the Ministry of Home Affairs, it creates institutional, legal, and financial frameworks at national, state, district, and local levels.

o The Act covers disaster mitigation, risk assessment, and crisis management, including relief, rehabilitation, and response efforts**.**

➢ **Intergovernmental Oceanographic Commission (IOC/UNESCO)**

o It fosters international collaboration in marine science and ocean management.

o The IOC is in charge of coordinating the United Nations Decade of Ocean Science for Sustainable Development 2021-2030, the "**Ocean Decade".**

o The UNESCO-IOC Tsunami Ready Recognition Programme (TRRP) boosts tsunami preparedness through education, training, and response planning. Communities are assessed on 12 key indicators to evaluate their readiness.

➢ **The Sunda Trench**

o It is the deepest ocean trench of the Indian Ocean, located in the eastern region, south and west of Java and Sumatra.

o It stretches 3,200 km from the Andaman Islands to the Lesser Sunda Islands. With a maximum depth of 7,290 meters, it was formed by the subduction of the Australian-Capricorn plates beneath the Eurasian plate. As part of the Pacific Ring of Fire, the trench is seismically active.
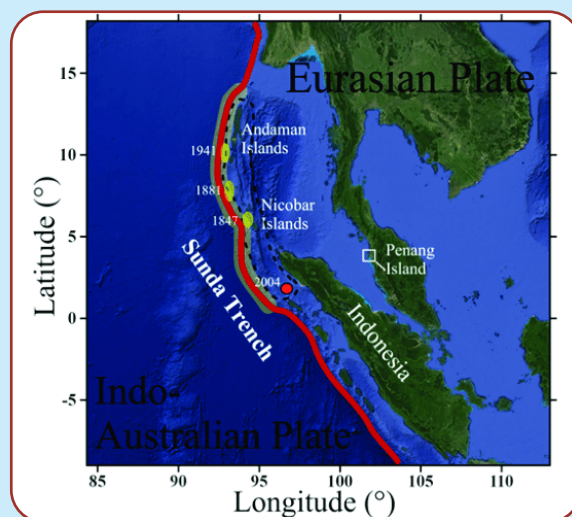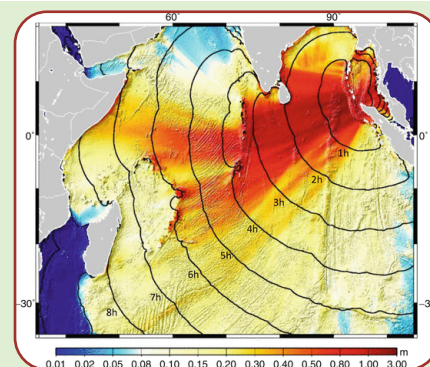

Indian Ocean Tsunami 2004

• The tsunami occurred on December 26, 2004, triggered by a 9.1 magnitude earthquake in the Sunda Trench.

• Affected 14 countries, including Indonesia, Sri Lanka, India, and Thailand.

• Over 227,000 people lost their lives, making it one of the deadliest natural disasters in history.

- **Source of the Indian Ocean Tsunami**
  - The earthquake, the third largest since 1900, originated 30 km beneath the ocean floor in the Sunda Trench.
  - The rupture stretched across 1,300 km of the plate boundary, from Sumatra to the Coco Islands.
  - The tsunami was caused by the subduction of the Indo-Australian plate beneath the Burma microplate, part of the Eurasian plate.

KEY PROGRESS SINCE 2004

- **Regional Collaboration:**
  - The establishment of the **Indian Ocean Tsunami Warning and Mitigation System (IOTWMS)** has been a cornerstone of disaster preparedness.
  - With Australia, Indonesia, and India as regional tsunami service providers, 27 national centers can now receive alerts within 10–15 minutes of a seismic event.

- **Technological Advancements:**
  - Countries like Thailand have implemented sophisticated warning systems, including:
    - Tsunami detection buoys in the Andaman Sea.
    - 130 warning towers broadcasting alerts in multiple languages.
    - Tide gauge stations for real-time monitoring.
  - Modern technologies ensure timely warnings, reducing potential casualties and damages.

- **Community Preparedness:**
  - Coastal regions emphasize public awareness and regular tsunami drills.
  - Infrastructure such as vertical shelters and evacuation route signage supports efficient evacuation.

    Warning systems broadcast alarms in multiple languages, ensuring inclusivity for diverse populations.

ADVANCES IN TSUNAMI SCIENCE IN INDIA

- **Indian Tsunami Early Warning Centre (ITEWC):**
  - Established in Hyderabad after the 2004 disaster, the ITEWC operates under the Indian National Centre for Ocean Information Services (INCOIS).
  - It specializes in detecting tsunamigenic earthquakes and issuing timely warnings to minimize risks.

- **Enhanced Early Warning Systems (TEWS):**
  - Operational since 2007, India's advanced TEWS integrates data from seismic stations, tide gauges, and **Deep-ocean Assessment and Reporting of Tsunamis (DART)** buoys.
  - These systems monitor pressure changes on the seafloor, providing early detection capabilities.

- **Improved Technology:**
  - With modern algorithms and faster supercomputers, the time to detect and model tsunamis has been reduced significantly—from 50 minutes earlier to just **5–7 minutes** now.

- **Increased Monitoring Network:**
  - The number of sea-level monitoring stations has grown exponentially, from a single station in 2004 to over **14,000 stations globally**, ensuring robust data collection for early warning and response.

CHALLENGES AHEAD IN TSUNAMI PREPAREDNESS

- **Gaps in Early Warning Coverage:**
  - Despite advancements, coverage remains uneven, particularly in remote and underdeveloped regions, leaving vulnerable coastal communities exposed to risks.
  - Improving the density and accuracy of seismic networks and ocean buoys is crucial for effective early warnings.

- **Inadequate Infrastructure and Evacuation Plans:**
  - Many coastal areas still lack resilient infrastructure and well-designed evacuation routes.
  - Poor planning and maintenance can delay timely evacuation, exacerbating the impact of tsunamis.

☆ **Impact of Climate Change:**

o Rising sea levels and intensified storm surges due to climate change increase the frequency and severity of tsunami-related risks.

o Coastal erosion and compounded natural hazards create additional challenges for disaster management.

☆ **Limited Public Awareness and Education:**

o Many residents in high-risk areas are unaware of tsunami warning signs and lack knowledge of appropriate emergency responses.

o Public education campaigns and regular drills are essential to enhance preparedness and community resilience.

☆ **Funding and Resource Constraints:**

o Adequate financing for disaster preparedness remains a challenge, with many regions relying on piecemeal investments rather than comprehensive, sustainable solutions.

o Scaling up public-private partnerships and international aid is necessary to bridge resource gaps.

☆ **Transboundary Coordination Issues:**

o Effective tsunami preparedness requires seamless regional cooperation, but disparities in technological and institutional capacities among nations hinder collective action.

o Strengthening cross-border data sharing, training, and joint planning is vital for a cohesive response.

WAY FORWARD

✳ **Evolving Risks and the Need for Multi-Hazard Approaches**

o **Climate Change Impact:** Rising sea levels, increased ocean temperatures, and extreme weather events have amplified risks to coastal communities.

o **Cascading Hazards:** Tsunamis, often triggered by seismic events, can lead to secondary disasters, requiring integrated, multi-hazard risk management systems.

o Initiatives like the UN's **Early Warnings for All** and **Multi-Hazard Early Warning Systems (MHEWS)** provide timely alerts for a range of natural hazards, reducing loss of life and economic damage.

✳ **Regional Cooperation: A Key Pillar**

o Regional collaboration enables countries to share resources, data, and best practices.

- A notable example is the joint **Probabilistic Tsunami Hazard Assessment** for the Makran subduction zone by India, Iran, Pakistan, UAE, and Oman, which aids in risk-informed

decision-making for evacuation and warnings within 20 minutes of an event.

✳ **Addressing System Gaps**

o End-to-end tsunami warning systems, from global to local levels, need continuous assessment and improvement.

o Needed Indian and Pacific Ocean capacity assessments examine the full warning and mitigation system, identifying areas for targeted enhancements.

✳ **Financing Disaster Preparedness**

o **Investment in Preparedness:** Financing for disaster preparedness must be scaled up. Preparedness investments are more cost-effective than post-disaster recovery efforts.

o Mechanisms like the **ESCAP Multi-Donor Trust Fund for Tsunami, Disaster, and Climate Preparedness** have proven crucial for building resilience, offering countries access to shared tools and expertise.

CONCLUSION

To effectively mitigate tsunami impacts and improve early warning systems, a comprehensive approach is needed, incorporating technology, natural barriers, public engagement, and international cooperation. Enhancing preparedness and response capabilities is crucial to building long-term resilience for coastal communities.

SAMPLE QUESTION

Q) What significant advancements in tsunami science and early warning systems have emerged since the 2004 Indian Ocean tsunami, and how have these improvements impacted coastal communities and the global response to tsunami threats? **(15 marks) (250 words)**

COMMONS IN CRISIS

Syllabus: GS III - Enviromental Conservation

PYQ MAPPING

Q) *Do government's schemes for up-lifting vulnerable and backward communities by protecting required social resources for them, lead to their exclusion in establishing businesses in urban economics?* **(2014)**

Q) *The right to fair compensation and transparency land acquisition, rehabilitation and resettlement act, 2013 has come into effect from 1 January 2014. What implication would it have on industrialisation and agriculture in India?* **(2014)**

WHY IN NEWS

The 2011 Supreme Court judgement on protecting commons has gained attention again due to its uneven implementation. A *Down to Earth* article highlights ongoing cases, such as the **encroachments in Punjab's Rohar Jagir village**, showcases challenges in balancing eviction with social justice.

INTRODUCTION

Commons, the shared resources that sustain communities and ecosystems, are often invisible yet indispensable threads in India's socio-economic fabric. Despite judicial interventions and policy reforms, the lack of effective implementation and accountability continues to undermine their restoration and equitable access.

SHORT TAKES

➤ **Global commons:** Areas of the planet that are outside of national jurisdictions and are accessible to all nations. They include areas like the high seas, the atmosphere, Antarctica, and outer space.

➤ **Tragedy of the Commons:** Garrett Hardin in the 1960s argued that common resources would inevitably be over-exploited without external intervention. Individuals tend to overuse a shared resource, which can lead to its destruction. This can happen when people act in their own self-interest without considering the negative impact on others.

➤ **Elinor Ostrom:**

- A pioneering economist whose research **challenged the "Tragedy of the Commons" theory**, popularized by Garrett Hardin.

- Through her field studies, Ostrom demonstrated that **community-led governance systems** could effectively manage commons sustainably, without the need for government or market control.

ELINOR OSTROM
2009 Nobel Laureate in Economic Sciences
Nobel medal © ® The Nobel Foundation

- Her groundbreaking work, which earned her the **Nobel Prize in Economics in 2009**, is encapsulated in her book *Governing the Commons: The Evolution of Institutions for Collective Action*.

What are Commons

- **Definition**: Commons are **shared natural resources**, including water bodies, forests, pastures, and grazing lands, accessible to all members of a community.

  o Commons can also be **intangible**, such as language, folk art, local customs, traditional knowledge.

  o At the international level, areas like the Arctic, Antarctica, outer space, and the Moon are considered **global Commons**.

- **Legal Status:** Often classified as **"gair mumkin"** (uncultivable) land in India, commons are meant for communal use and are protected by local governance structures like gram panchayats.

- **Extent**: Commons account for **15-25% of India's landmass**, as highlighted in a **2015 policy paper by Shalini Bhutani and Kanchi Kohli.**

IMPORTANT GLOBAL COMMONS MANAGEMENT TREATIES

➡ **Antarctic Treaty System (ATS), 1959**

o Ensures Antarctica is used only for peaceful purposes, bans military activities, and promotes international scientific cooperation.

o Prohibits mineral resource exploitation and preserves the ecological integrity of the region.

o **India's Status**: Signed in 1983 and ratified in 1985. Operates research stations like Maitri and Bharati in Antarctica.

➡ **Outer Space Treaty, 1967**

o Regulates the exploration and use of outer space, prohibiting national appropriation, weaponization, and contamination of celestial bodies.

o **India's Status**: Ratified in 1982. Contributes through its space programme led by ISRO.

➡ **Moon Agreement (Agreement Governing the Activities of States on the Moon and Other Celestial Bodies), 1979**

o Declares the Moon and celestial bodies as the "common heritage of mankind," ensuring peaceful use and equitable resource sharing.

o Prohibits sovereignty claims and mandates benefit-sharing of lunar resources.

o **India's Status**: Signed in 1982 but not yet ratified.

➡ **United Nations Convention on the Law of the Sea (UNCLOS), 1982**

o Governs the use and conservation of marine resources, including navigation, exclusive economic zones (EEZs), and the continental shelf.

o Aims to balance the rights of coastal states with the freedom of the high seas.

o **India's Status**: Ratified in 1995.

➡ **Convention on Biological Diversity (CBD), 1992**

o Focuses on conserving biodiversity, ensuring sustainable use of biological resources, and fair sharing of benefits from genetic resources.

o Includes protocols like Nagoya (access and benefit-sharing) and Cartagena (biosafety).

o **India's Status**: Ratified in 1994. Has enacted the Biological Diversity Act, 2002, to comply with the treaty.

IMPORTANCE

🔹 **Livelihood Source:** Support pastoralists, livestock, and marginalised communities, providing essential resources like water and grazing land.

🔹 **Economic Value**: Commons in India generate an economic value of approximately Rs 6.6 lakh crore annually through goods and ecological services.

🔹 **Ecological Role:** Recharge groundwater, sustain biodiversity, and act as buffers against climate change.

🔹 **Social Equity:** Ensure resource access for the poor and landless, fostering social inclusion and reducing inequalities.

THREATS

🔹 **Encroachments**: Illegal construction and occupation, as seen in **Rohar Jagir in Punjab**, where a 7.2-hectare pond has shrunk to 4-6 hectares due to encroachments.

🔹 **Degradation**: Encroachments lead to pollution, such as water hyacinth and sewage clogging the ponds, reducing its ecological and social utility.

🔹 **Over-Exploitation**: Face the threat of over-exploitation and damage due to their open accessibility.

🔹 **Climate Change**: Climate change has added stress to Commons, exacerbating the challenges of sustainable management.

🔹 **Governance Failures:** Local authorities, such as gram panchayats, often fail to act due to political pressure, fear of unrest, or prioritising revenue generation over conservation.
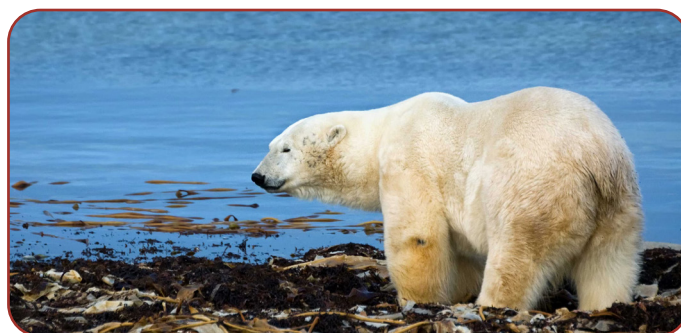
LANDMARK JUDGEMENTS

✏️ **Jagpal Singh vs State of Punjab (2011):**

o **Background:** The dispute began in 2003 when Jagpal Singh tried to build a house on a 7.2-hectare pond in Rohar Jagir in Punjab, leading to opposition from other residents and the gram panchayat.

- The case escalated through various legal forums, including the district collector, joint development commissioner, Punjab and Haryana High Court, and ultimately the Supreme Court in 2011.

✏️ **Ruling**:

o The Supreme Court ordered the eviction of illegal occupants from commons across India, except in "exceptional cases" such as landless labourers, SC/ST communities, or public utilities like schools.

✏️ **Impact**: The judgement **inspired states to enact policies** for reclaiming commons.

o **Rajasthan** established Public Land Protection Cells in 2019, redirecting 420 cases to courts.

o **Madhya Pradesh** and **Assam** followed suit with district-level cells in 2021 and 2023, respectively.

o **Jharkhand** invoked the Panchayati Raj Act, 2001, to reclaim commons.

o The **Bombay High Court**, in 2022, demanded a roadmap for removing 222,153 encroachments on grazing lands.

✏️ **Land Conflict Watch Data**: In 64.25% of cases, courts failed to consider the rights of encroachers, such as the right to a fair hearing or advance notice, leading to a 58% eviction rate. When these rights were considered, the eviction rate dropped to 42%, indicating more equitable outcomes.

BEST PRACTICES IN INDIA

🇮🇳 **Telangana:** Mission Kakatiya, a state-led initiative focused on **restoring minor irrigation tanks** with active community participation, enhancing water storage capacity, supporting agriculture, and improving livelihoods

🇮🇳 **Madhya Pradesh:** In Mandla village, community efforts led by Gram Paryavarn Samiti and Van Suraksha Samiti **removed invasive species Lantana Camara and promoted reforestation** through Farmer Managed Natural Regeneration (FMNR), restoring native forests, biodiversity, and grazing lands.

🇮🇳 **Sikkim**: **Sacred groves** protected by traditional beliefs, play a key role in conserving biodiversity and ensuring ecological stability.

🇮🇳 **Tamil Nadu:** The Gene Pool Garden in Gudalur forest division , **conserves over 1,500 plant species endemic to the Western Ghats**, with community involvement through the Eco-Development Committee, and has been developed as an eco-tourism spot

GLOBAL BEST PRACTICES

☀️ **Switzerland**

o In the Ursern Valley of central Switzerland, the **community-owned corporation manages over 90% of the land**, overseeing sustainable grazing of alpine pastures, hydroelectric power stations and avalanche protection in collaboration with local municipalities.

☀️ **Spain**

o The Water Court of Valencia, composed of eight members elected by 10,000 farmers, serves the purpose of **settling irrigation disputes and ensuring fair water distribution for agriculture** in the region, a practice dating back to the 10th century.

☀️ **Netherlands**

o The **traditional polders**, created from the 12th century by **draining delta swamps to convert them into arable land**, are managed by water boards and local communities, supporting dairy farming and biodiversity.

☀️ **South Korea**

o The Haenyeo women divers of Jeju Island **manage their diving grounds** through a self-organized, culturally embedded system with strict rules on diving times, catch limits, and income sharing, as they dive to harvest seafood.

Commons Convening 2024

- **Event Overview**: The Commons Convening 2024, held from August 27-29 at the Dr. Ambedkar International Centre (DAIC) in New Delhi, gathered 500+ participants to discuss India's Commons conservation.

- **Key Focus**: 37 sessions covered governance, climate change, social inequality, and Commons' role in food systems and biodiversity.

- **Partners and Call to Action**: Co-organized by Common Ground, FES, Landstack, TISS Mumbai, UNDP India, and CoRe, the event concluded with a push for strengthened collaboration to protect Commons.

WAY FORWARD

- **Develop Legal Frameworks for Other Commons:** Build similar governance models for commons based on the **Forest Rights Act (FRA) 2006,** model which grants individual and community ownership rights to forest-dwellers

- **Participatory Governance**: Involve local communities in decision-making to ensure fair management and restoration of commons.

  o **Example:** Research by **Elinor Ostrom** in her book **Governing the Commons: The Evolution of Institutions for Collective Action**, has shown that community-led governance structures result in more sustainable management of Commons.

- **Rehabilitation Measures:** Provide compensation or alternative land for those evicted, especially vulnerable groups unaware of their encroachment.

- **Transparent Mechanisms:** Implement grievance redressal systems to address disputes and hold custodians accountable.

- **Model Commons Bill**: NGOs have called for a model Commons Bill to be legislated by the Centre, which can be adopted by states for better governance of Commons.

- **Customised Policies:** Develop region-specific strategies that address social hierarchies, ecological needs, and cultural practices.

- **Ecological Restoration**: Focus on restoring degraded commons to their original utility, ensuring long-term sustainability and community benefits.

  o **Example**: Padms Shri Awardee Tulsi Gowda, an environmentalist from Karnataka, has planted over 30,000 saplings, demonstrating the power of individual action in restoring natural resources.

CONCLUSION

The challenges surrounding commons highlight deep-rooted governance and social inequities that require nuanced, locally tailored solutions. Strengthening community participation, ensuring fair rehabilitation measures, and holding custodians accountable are critical to achieving sustainable and inclusive management of these shared resources.

SAMPLE QUESTION

Q) "The governance of Commons is a shared responsibility." Discuss the role of collective responsibility in the sustainable management of Commons. **(10 marks) (150 words)**

WEEKLY DOSSIERS
GENDER BASED VIOLENCE

Gender-based violence (GBV) is a form of violence directed at individuals due to their gender and is deeply rooted in gender inequality. While it can affect both men and women, the majority of victims are women and girls. It represents a significant human rights violation globally.

Terminology:

GBV and violence against women (VAW) are often used interchangeably, as most GBV disproportionately affects women and girls, perpetrated primarily by men. However, the term GBV highlights the underlying power inequalities between genders, emphasizing the systemic nature of such violence.

ADDRESSING GENDER-BASED VIOLENCE: AWARENESS AND STRATEGIC INTERVENTIONS BY GISC, IMPRI

The Gender Impact Studies Center (GISC) at IMPRI Impact and Policy Research Institute, New Delhi organized a four-week online national program aimed at addressing gender-based violence (GBV) through awareness of policies and governance. This program brought together experts, practitioners, and participants to explore innovative solutions and deepen their understanding of GBV.

UNDERSTANDING GENDER-BASED VIOLENCE

◊ **Ecological Model of Gender-based Violence**

The program introduced the Ecological Model as an alternative strategy for understanding gender-based violence. This model explains abuse through various independent layers:

- **Individual Level:** Gender-based violence is linked to societal expectations of submissive femininity for women and dominant masculinity for men. Gender roles and stereotypes, resulting from such classifications, ultimately lead to abuse.

- **Interpersonal Level:** This level involves stigma, shame, and silence, which hinder accountability for violence against women.

- **Community Level:** At this level, inequitable norms and practices perpetuate gender-based inequality and abuse.

- **Societal Level:** The final layer encompasses discriminatory laws and practices that are deeply entrenched in gender inequality.

PREVENTIVE INITIATIVES

It emphasised the importance of **universal prevention strategies**, which focus on reducing abuse and exploitation at the community or population level. These strategies typically adopt an awareness-generation approach to curb gender-based abuse. **Selective prevention** strategies, on the other hand, focus on working with highly vulnerable communities to address gender-based violence. A third approach, **response-side programs**, aims to address the needs of survivors of violence.

STRATEGIC ACTION AREAS

◊ **Evidence-based Research**: Research helps in better understanding gender-based violence and recognizing the agency of women in society.

◊ **Engendering Laws and Programs**: There is a need to develop gender-sensitive laws, programs, and policing, with a multi-stakeholder partnership between survivors, lawmakers, and law enforcement agencies.

◊ **Tech-based Solutions**: examples of mobile applications developed to help women fight against violence.

◊ **Capacity Enhancement**: Strengthening institutions and enhancing the capacity of duty-bearers increases accountability among authorities.

◊ **Intersectionality with Women's Economic Empowerment**: The need for intersectionality, explaining how women's economic empowerment can contribute to fighting gender-based violence.

CONCLUSION

The program illustrates the importance of comprehensive approaches to tackling GBV. The insights provided by the Gender Impact Studies Center highlight the need for multi-layered strategies, evidence-based interventions, and collaborative partnerships to create a safer and more equitable society.

TACKLING GENDER-BASED VIOLENCE THROUGH DATA-DRIVEN INNOVATION AND COMMUNITY EMPOWERMENT

The **Winter'23 LPPYF Law and Public Policy Youth Fellowship**, organized by the **Centre for Human Dignity and Development (CHDD)** and the **Gender Impact Studies Center (GISC) at IMPRI Impact and Policy Research Institute**, was a one-month online certificate training and internship program aimed at promoting human rights and addressing gender-based violence (GBV).

The program emphasized policy engagement, awareness, and innovative solutions to combat GBV. Ms. ElsaMarie D'Silva, Founder of Red Dot Foundation, delivered an insightful session titled **"Addressing Gender-Based Violence and the Way Forward,"** exploring strategies and initiatives to tackle GBV effectively.

KEY INSIGHTS

◊ **Underreporting**: Although UN data indicates that one in three women globally experience GBV, anecdotal evidence suggests a much higher prevalence due to systemic underreporting.

◊ **Normalization**: Societal attitudes, such as dismissing harassment as "Eve teasing," contribute to the trivialization of violence against women, particularly in cultures steeped in patriarchal norms.

◊ **Patriarchal Structures**: GBV is entrenched in societal structures, where patriarchy fosters environments of impunity for perpetrators and systemic discrimination against women.

THE MANY FACES OF GENDER-BASED VIOLENCE

◊ **Non-Verbal Abuse**: Staring, unsolicited photography, and indecent gestures.

◊ **Verbal Abuse**: Catcalling, comments, and online harassment.

◊ **Physical Violence**: Groping, assault, rape, and murder.

◊ **Technology-Facilitated Violence**: Grooming, cyberstalking, and threats that seamlessly transition between online and offline spaces.

ADDRESSING GENDER-BASED VIOLENCE THROUGH DATA

The Birth of Safe City

To bridge the data gap on GBV, Ms. D'Silva co-created **Safe City**, a crowd-mapping platform for anonymously reporting instances of sexual and gender-based violence. Key features of Safe City include:

• **Data Collection and Analysis**: Aggregates anonymous reports to identify patterns and trends by location and type of violence.

• **Open-Source Format**: Provides public access to data for transparency and community engagement.

• **Privacy Standards**: Adheres to GDPR-compliant protocols to protect user data.

• **Global Reach**: Available in multiple languages and utilized in 20 countries.

Impact of Safe City

• **Transportation Improvements**: Enhanced safety measures for girls in Satara, India.

• **Community Engagement**: Mobilization of local stakeholders in Nairobi's informal settlements.

• **Collaborations with Authorities**: Partnerships with city officials in Quezon City, Brazil, and Sao Lorenzo to enact policy and infrastructure changes.

INTEGRATING TECHNOLOGY AND POLICY FOR SUSTAINABLE CHANGE

Ms. D'Silva highlighted the critical role of technology in bridging gaps and fostering collaboration among stakeholders. However, she underscored the need for a **multi-stakeholder approach** that includes:

• **Policy Advocacy**: Engendering gender-sensitive laws and policies.

• **Capacity Building**: Training duty-bearers and strengthening institutional accountability.

• **Intersectionality**: Integrating economic empowerment initiatives for women to address systemic inequalities.

• **Public Awareness Campaigns**: Educating communities to challenge normalization and reduce stigma.

GLOBAL AND NATIONAL CONTEXT

Citing data from NITI Aayog, Ms. D'Silva noted India's lagging performance on **Sustainable Development Goal 5 (Gender Equality)**:

- Low representation of women in politics and labor force.

- Skewed sex ratios and declining safety standards.
- India ranked as one of the most dangerous countries for women in the Thomson Reuters perception survey.

CONCLUSION

The case of **Safe City** exemplifies how innovation and community engagement can address entrenched societal issues like gender-based violence. By combining data-driven insights with youth-led advocacy, Safe City demonstrates the potential for transformative change.

TACKLING GENDER-BASED VIOLENCE THROUGH EMPOWERMENT AND COMMUNITY ENGAGEMENT

CARE International's **Indashyikirwa Project** in Rwanda is a flagship initiative addressing **gender-based violence (GBV)**, a pervasive human rights abuse rooted in patriarchal norms, inequality, and systemic discrimination.

Exacerbated by the COVID-19 pandemic, GBV remains a "shadow pandemic" impacting millions globally. CARE's multifaceted approach focuses on empowering women and girls, transforming discriminatory attitudes, and engaging men and boys to break cycles of violence.

By addressing harmful gender norms and promoting equality, the Indashyikirwa Project exemplifies CARE's commitment to reducing GBV for 7 million people by 2030.

INTERVENTION: THE INDASHYIKIRWA PROJECT

Indashyikirwa, meaning "Agents of Change" in Kinyarwanda, is an initiative targeting GBV prevention by challenging societal norms around masculinity, femininity, and power dynamics. The project engaged men and women as couples and individuals to foster equitable relationships and reduce GBV prevalence.

KEY STRATEGIES

◊ **Training on Gender Equality and Power Balancing:**

   o Couples learned about harmful gender norms and the importance of sharing responsibilities.

   o Economic violence, such as male-dominated control over finances, was addressed. For instance, one family transitioned to sharing property and financial management responsibilities, teaching their children gender-equal values.

◊ **Empowering Women and Girls:**

   o Survivors of sexual violence received physical, psychological, and economic support.

   o Education, health services, and livelihood opportunities were provided to empower women and girls.

◊ **Engaging Men and Boys:**

   o Men were actively involved in training to challenge harmful behaviors and embrace equitable practices.

   o The program emphasized transforming attitudes that perpetuate GBV.

◊ **Community and Local Partnerships:**

   o CARE partnered with local organizations to create culturally relevant responses to GBV.

   o Grassroots engagement ensured long-term, sustainable change.

IMPACT

An **impact evaluation** of Indashyikirwa revealed statistically significant reductions in physical and/or sexual intimate partner violence (IPV) after 24 months. Both men and women reported substantial improvements in relationships and a shift in gender norms.

KEY OUTCOMES

- Reduction in IPV incidents among participating couples.

- Enhanced understanding of gender equality among community members.

- Strengthened family dynamics through shared responsibilities and mutual respect.

- Positive intergenerational impact as children learned about equitable gender roles.

CONCLUSION

The Indashyikirwa project exemplifies how GBV can be effectively addressed through a combination of education, empowerment, and community engagement. CARE International's holistic approach—focusing on survivors, challenging societal norms, and involving all genders—has significantly reduced GBV in Rwanda.

ETHICS - CASE STUDY

Q) You are working as an excise officer in a district with a high rate of drug-related crimes. Recently, you arrested a gang of students in possession of marijuana, which included the son of the local MLA. Following the arrest, there has been significant political pressure to acquit the MLA's son, who belongs to the ruling party. The media has already made this case a mainstream issue. In response to the situation, there has also been political pressure to transfer you to a distant district.

a.   What will be your course of action and justify it.

b.   Also mention measures to reduce drug related crimes.

ETHICS - EXAMPLES

1.   **Lack of Integrity**: IAS officer Mihir Kumar Singh's recommendation of 36 books by his late father, Jagdish Prasad Singh, for panchayat libraries in Bihar has sparked controversy, with critics accusing him of misusing power. The matter is under review by the Panchayati Raj Minister.

2.   **Corruption:** Saurabh Sharma, a former constable in the Madhya Pradesh Road Transport Office, has come under investigation for possessing unaccounted assets worth Rs 7.9 crore, including gold, silver, diamond jewellery, and luxury cars, amid allegations of corruption and disproportionate wealth accumulation during his tenure.

3.   **Compassion:** Santa and Mrs. Claus, accompanied by the Alaska National Guard, arrived in Yakutat village in the United States as a part of Operation Santa Claus. They delivered gifts and supplies, including backpacks filled with books, snacks, and school supplies, to children affected by heavy snowfall recently.

4.   **Ethics in Education:** The Centre has scrapped the no-detention policy in Kendriya Vidyalayas and Jawahar Navodaya Vidyalayas, allowing students of Classes 5 and 8 to be held back if they fail to meet promotion criteria. This follows the 2019 amendment to the Right to Education Act, with 18 States and UTs already adopting similar measures.

5.   **Crisis Management:** Delhi teachers were trained on bomb threat response, drug abuse prevention, and cyber hygiene as part of the Samvaad initiative. The session, led by Delhi Police and Crime Branch experts, aimed to equip educators with tools to ensure student safety.

6.   **Empathy in Administration:** After a cement company acquired his land and house in Rajasthan's Jhunjhunu, farmer Vidhyadhar Yadav demanded ₹6 crore compensation, rejecting ₹4 crore offered. Following his suicide threat, police deployed 99 personnel for his family's safety and later billed him ₹9.9 lakh, calling it a deterrent against such threats.

7.   **Social Harmony:** Poleana, originating in Mexican prisons in the 1940s, is based on the ancient Indian game chaupar and has evolved through Western versions like Ludo. Now popular outside prisons, it offers a therapeutic outlet and fosters community connection, helping players escape their realities.

8.   **Social Responsibility:** Sahyog Care For You, an NGO founded by Shekhar Mahajan, has rescued over 2,700 children, offering rehabilitation, education, and vocational training to break the cycle of exploitation and provide them with a better future.

9.   **Creativity and Innovation**: Srinagar's papier mache artisans have revived the extinct dodo bird, creating over 50,000 figurines for export, mainly to Mauritius. The vibrant dodos, a recent addition to Kashmir's 600-year-old craft, symbolize the bird's extinction due to deforestation.

10. **Consumer Rights:** The DGCA fined Akasa Air ₹10 lakh for not compensating seven passengers denied boarding on its Bengaluru-Pune flight, as the alternative flight was over an hour later. The airline's claim of circumstances beyond its control was rejected under Civil Aviation Requirements (CAR).

MODEL ESSAY

"It is hard to free fools from the chains they revere"

Introduction

- Quote by Voltaire

- **Define revered chains** as beliefs, customs, or ideologies that people cling to despite their harmful effects.

- Highlight blind adherence to flawed systems or beliefs hinders progress and freedom.

Barriers to Freedom

- **Ignorance and Lack of Education:** Prevent individuals from recognising their own oppression or questioning established norms.

- **Cultural and Social Conditioning:** Deeply ingrained traditions and societal expectations create resistance to change **Eg**: caste discrimination in India

- **Fear of Change and the Unknown:** Anxiety about stepping into unfamiliar territory leads individuals to cling to existing systems, even if they are oppressive.

- **Authoritarian Control and Oppression:**Governments or institutions restrict freedom through censorship, surveillance, and coercion **Eg**: censorship in North Korea

- **Religious Dogmatism:** Unquestioned adherence to religious doctrines can perpetuate inequality.

Breaking the Chains

- Promoting universal education to empower individuals.

- Teaching empathy and tolerance to reduce prejudice.

- Implementing anti-discrimination laws (Reservation policies in India.)

- Providing platforms for marginalised voices in governance(Women's representation in Panchayati Raj.)

- Grassroots movements addressing local issues (Chipko movement for environmental protection).

- Bridging the digital divide to enable information access and innovation (Digital India Campaign)

Examples of Transformation

- **India's Independence Movement:** Gandhi's leadership turned colonial oppression into a democratic nation.

- **Malala Yousafzai:** From a victim of violence to a global advocate for education and women's rights.

- **India's 1991 Economic Reforms:** Liberalisation revitalised the economy, boosting growth and foreign investment.

- **Industrial Revolution:** Shifted agrarian societies to industrialised economies, revolutionising production and transportation.

Conclusion

- Reiterate the difficulty of freeing people from revered chains due to psychological, cultural, and societal barriers.

- Emphasise the role of education, empathy, and grassroots efforts in dismantling oppressive systems.

Sample Quotes

- *A leader or a man of action in a crisis almost always acts subconsciously and then thinks of the reasons for his action - Jawaharlal Nehru*

- *Quality is not an act, it is a habit - Aristotle*

- *A man is but the product of his thoughts, what he thinks he becomes- Gandhi*

MAINS JOT DOWN

GS- II - *HEALTH*

➡ China is witnessing a rise in **Human Metapneumovirus** cases, especially among children under 14.

» About HMPV: A respiratory virus that causes mild cold-like symptoms. Discovered in 2001, it belongs to the Pneumoviridae family, including RSV.

» Transmission: Spread through person-to-person contact or surfaces.

» Symptoms: Cough, fever, nasal congestion, and shortness of breath.

» Treatment: No specific antiviral treatment or vaccine available for HMPV.

GS- III - *AGRICULTURE*

➡ **Project VISTAAR (Virtually Integrated System to Access Agricultural Resources)**

➡ **About:**

» Developed by IIT Madras and the Ministry of Agriculture and Farmers' Welfare.

» A **"Network of Networks"** (AI-augmented) enabling states to build their own agri-advisory systems.

» Integrates decentralized databases for seamless access to agricultural resources.

➡ **Objective:**

» Enhance decision-making and optimize resource utilization.

➡ **Significance:**

» Offers high-quality advice on crop production, marketing, value addition, and supply chain management.

» Provides farmers with timely information on government schemes.

GS- II - *POLITY*

➡ The **Supreme Court ruled that the CBI does not need state government consent to register a case under Central laws like the Prevention of Corruption Act against a Central government employee posted in the state,** overturning an Andhra Pradesh High Court decision that had dismissed such cases for lack of state consent.

» **About State Consent for CBI:** Under Section 6 of the Delhi Special Police Establishment (DSPE) Act, 1946, the CBI needs state consent for investigations of crimes within a state. There are two types of consent: General Consent and Case-specific Consent.

GS- III - *ECONOMY*

➡ The Ministry of Finance has launched the revamped e-auction portal, **BAANKNET.**

» **About BAANKNET**: It consolidates e-auction property listings from all Public Sector Banks, offering a one-stop platform for buyers and investors. The site includes residential, commercial, and industrial properties, such as flats, houses, land, and shops.

» The platform aims to unlock the value of distressed assets and boost investor confidence.

GS- III - *DEFENCE*

➡ An Indian Army contingent has departed for Nepal to participate in the **18th Battalion Level Joint Military Exercise, SURYA KIRAN.** This annual exercise alternates between India and Nepal.

» Objective: To improve interoperability in jungle warfare, counter-terrorism operations in mountains, and Humanitarian Assistance and Disaster Relief under the UN Charter.

» Significance: It strengthens the strong friendship and trust between India and Nepal, enhancing professional ties and defense cooperation.

GS- III - *DISASTER MANAGEMENT*

- The Inter-Ministerial Central Team (IMCT) has classified the Wayanad landslides as a "calamity of severe nature."
  - » Legal Basis: There are no specific criteria in the State Disaster Response Fund (SDRF) or National Disaster Response Fund (NDRF) guidelines for this classification. However, the central government makes this designation based on the scale of loss to life and property, often following IMCT recommendations.
  - » For such calamities, the NDRF provides additional funds beyond the state's SDRF balance.

GS- III - *SCIENCE & TECHNOLOGYT*

- Manastu Space, an IIT Bombay startup, **successfully tested its green propulsion system, VYOM 2U, aboard PSLV C60 using POEM-4,** which offers triple the capacity of its predecessor, POEM-3.
  - » About POEM: Launched by ISRO, POEM provides a cost-effective platform for on-orbit experiments, making space access more affordable for smaller entities. It converts PSLV's fourth stage into a free-flying testbed in low Earth orbit.
  - » Strategic Importance: POEM reduces entry barriers for startups and fosters space technology innovation in India.

- Researchers have successfully teleported a **quantum state of light over 30 kilometers of fiber optic cable,** demonstrating the potential for quantum and classical networks to share infrastructure.
- **Quantum Teleportation involves transferring quantum information between two points using entangled states**, where changes to one particle instantly affect the other, regardless of distance.
- Significance: This breakthrough advances the development of a quantum internet, enabling faster encryption, enhanced sensing, and global connectivity for quantum computers.

GS- I -*IMPORTANT PERSONALITIES IN NEWS*

- The Prime Minister paid tribute to **Rani Velu Nachiyar on her birth anniversary.**
  - » **Rani Velu Nachiyar:** A princess of Ramanathapuram (Tamil Nadu) and daughter of the ruler of the Ramnad kingdom. Known as **Veeramangai**, she reclaimed the Sivagangai kingdom after her husband's death. She was proficient in languages like French, English, and Urdu.
  - » The first queen to actively oppose British rule, she collaborated with Hyder Ali and Gopala Nayaker to fight the British. She created the first human bomb and established an army of trained women soldiers.

- The Prime Minister greeted people on the **'Urs'** **of Khwaja Moinuddin Chishti**, an annual event held at his shrine to mark his death anniversary.
- **About Khwaja Moinuddin Chishti:** Born in 1141 CE in Chishti, Herat (Afghanistan), he was the most prominent saint of the Chishti Sufi order in the Indian Subcontinent, which he founded in India. The Chishti tradition emphasized austerity and detachment from worldly power.
  - » Famous disciples: **Khwaja Qutbuddin Bakhtiyar Kaki, Nizamuddin Auliya, and Naseeruddin Charagh,** among others.

CHERRYPICKS OF THE WEEK

NEUTRINOS

- They are tiny, uncharged particles similar to electrons. They are fundamental subatomic particles and abundant in the universe.
- Studying high-energy neutrinos aids in astrophysical research, including exploring the Milky Way, cosmic rays, and dark matter.

NOROVIRUS

- It is a highly contagious virus that causes gastroenteritis, or "**stomach flu,**" with symptoms like nausea, vomiting, and diarrhea.
- It is resilient, surviving freezing and temperatures up to 60°C. Transmitted through contaminated food, water, or person-to-person contact, there is no specific medication for it.

H1-B VISAS

- It was introduced in 1990, allowing U.S. employers to hire skilled foreign workers for specialized jobs.
- The visa is valid for up to six years, after which the holder must either leave for at least 12 months or apply for permanent residency.

ANTI-DUMPING DUTY

- It is a tax imposed to counteract the negative effects of dumping, where goods are exported at prices below their normal value.
- It is authorized under Article VI of the 1994 General Agreement on Tariffs and Trade.

METHYLCOBALAMIN

- It is a natural form of vitamin B12 found in foods like fish, meat, eggs, and milk, or available as a supplement.
- It plays a key role in DNA synthesis, red blood cell production, and neurological function.
- Other forms include cyanocobalamin and hydroxocobalamin.
- It is used for pain relief in diabetic neuropathy, treating anemia, and managing Alzheimer's disease.