

# CURRENT AFFAIRS

WEEKLY

WEEK: 5  
JANUARY  
2024

## MAINS

- GS- I**
  - FRANCE TO EMBED ABORTION RIGHTS IN ITS CONSTITUTION
  - COLONIAL ROOTS OF 'CASTE' AND ITS IMPACT ON HINDU SOCIETY
  - MODIFIED PKC-ERCP RIVER LINKING PROJECT

- GS- II**
  - THE LEGAL DISPUTE OVER AMU'S MINORITY STATUS: A 57-YEAR JOURNEY
  - PROS AND CONS OF SIMULTANEOUS ELECTIONS IN INDIA

- GS- III**
  - UNCTAD FLAGS CLIMATE CHANGE AND WAR AS DISRUPTORS OF GLOBAL SEA TRADE
  - MOVING BEYOND PROTECTIONISM: REVITALIZING INDIA'S AUTO INDUSTRY
  - END-TO-END ENCRYPTION
  - SUB-TOPIC: ENVIRONMENTAL DEGRADATION AND CONSERVATION
  - HYBRID VEHICLES AND SUSTAINABLE MOBILITY
  - STATUS REPORT OF SNOW LEOPARDS IN INDIA

## PRELIMS

### GOVERNANCE AND SOCIAL JUSTICE

- Etikoppaka toys
- All India Survey on Higher Education (AISHE) 2021-2022
- Yuva Sangam (Phase IV)
- The Challenge of Implementing GIS-Based Master Plans
- Government Aims to Make 30 Key Cities Beggary-Free
- Strengthening India's Quality Ecosystem
- One Stop Centres Scheme

### POLITY AND GOVERNANCE

- Codifying traditional med data to boost research
- Prohibition of Child Marriage (Amendment) Bill, 2021
- Corruption Perceptions Index 2023

- National Mission for Mentoring

### INTERNATIONAL RELATIONS

- India's First Private Helicopter Assembly Line

### INDIAN ECONOMY

- VCM in Agriculture Sector and Accreditation Protocol of Agroforestry Nurseries
- Survey to assess women participation in workforce

### SCIENCE AND TECHNOLOGY

- Outbreak of Western Equine Encephalitis Virus in Argentina

### ECOLOGY AND ENVIRONMENT

- New Ramsar Sites

## NEWS IN SHORT

- Jeevan Raksha Padak Series of Awards-2023
- 'Rajmargyatra' app
- SAMALEI Plan
- Maratha Military Landscapes
- Ex. SADA TANSEEQ
- Birds of many feathers spotted in Ramnad's wetlands
- Bharat 5G Portal and Venture Capitalists/ Investors meeting
- PFRDA TRACE
- Maritime Single Window and MMD Modules in Sagar Setu (NLP-Marine)
- Golden Tiger

## SPECIALS

- Humboldt's Enigma

**GS SCORE**

An Institute for Civil Services

[www.iasscore.in](http://www.iasscore.in)

## — **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

## WEEK - 5 (JANUARY, 2024)

<b>Section - A: MAINS CURRENT AFFAIRS</b>			
Section of GS		Topics in News	Page No.
GS I	INDIAN SOCIETY	• France to Embed Abortion Rights in its Constitution	02
		• Colonial Roots of 'Caste' and Its Impact on Hindu Society	04
	GEOGRAPHY	• Modified PKC-ERCP River Linking Project	04
GS II	POLITY AND GOVERNANCE	• The Legal Dispute Over AMU's Minority Status: A 57-Year Journey	05
		• Pros and Cons of Simultaneous Elections in India	06
GS III	ECONOMY	• UNCTAD Flags Climate Change and War as Disruptors of Global Sea Trade	07
		• Moving Beyond Protectionism: Revitalizing India's Auto Industry	08
	SCIENCE AND TECHNOLOGY	• End-to-End Encryption	09
	ENVIRONMENT	• Sub-topic: Environmental Degradation and Conservation	10
		• Hybrid Vehicles and Sustainable Mobility	12
		• Status Report of Snow Leopards in India	13
<b>Section - B: SPECIAL</b>			
Section of GS		Topics in News	Page No.
GS III	?????	• Humboldt's Enigma	16
<b>Section - C: PRELIMS CURRENT AFFAIRS</b>			
Section of GS		Topics in News	Page No.
GS II	GOVERNANCE AND SOCIAL JUSTICE	• All India Survey on Higher Education (AISHE) 2021-2022	22
		• Yuva Sangam (Phase IV)	22
		• The Challenge of Implementing GIS-Based Master Plans	23
		• Government Aims to Make 30 Key Cities Beggary-Free	24
		• Strengthening India's Quality Ecosystem	25
		• One Stop Centres Scheme	26

# PRELIMS FOCUS

30 DAYS

PRELIMS  
REVISION  
CRASH  
COURSE



PROGRAMME FEE  
₹ 6,000 (+GST)

COMBO 1

PRELIMS CRASH COURSE  
+ CURRENT AFFAIRS  
CLASSES  
₹ 8,000 +GST

COMBO 2

PRELIMS CRASH COURSE  
+ CURRENT AFFAIRS CLASSES  
+ MOCK TEST SERIES  
₹ 10,000 +GST



Complete  
Coverage of  
Prelims Syllabus  
in 30 days through  
100+ Hrs. Classes



Refinement of  
skills necessary  
for Complete  
Prelims  
Readiness



6 Sectional  
Tests after  
completion  
of each subject



Doubt  
Clearing  
Session &  
Mentorship



8448496262



iasScore.in

GS II	POLITY AND GOVERNANCE	• Codifying traditional med data to boost research	27
		• Prohibition of Child Marriage (Amendment) Bill, 2021	28
		• Corruption Perceptions Index 2023	28
		• National Mission for Mentoring	29
	INTERNATIONAL RELATIONS	• India's First Private Helicopter Assembly Line	30
GS III	INDIAN ECONOMY	• VCM in Agriculture Sector and Accreditation Protocol of Agroforestry Nurseries	31
		• Survey to assess women participation in workforce	31
	SCIENCE AND TECHNOLOGY	• Outbreak of Western Equine Encephalitis Virus in Argentina	32
	ENVIRONMENT AND ECOLOGY	• New Ramsar Sites	33
<b>Section - D: SHORT NEWS</b>			
<b>Topics in News</b>			<b>Page No.</b>
Jeevan Raksha Padak Series of Awards-2023			38
'Rajmargyatra' app			38
SAMALEI Plan			39
Maratha Military Landscapes			39
Ex. SADA TANSEEQ			40
Birds of many feathers spotted in Ramnad's wetlands			40
Bharat 5G Portal and Venture Capitalists/Investors meeting			41
PFRDA TRACE			41
Maritime Single Window and MMD Modules in Sagar Setu (NLP-Marine)			42
Golden Tiger			43

# PRELIMS TEST SERIES 2024

## SECTIONAL + MOCK

2800+ QUESTIONS



Tests as per **Changing Pattern** of the **UPSC Prelims**



**Concept & Essential Skills Building** through Tests and their Discussion



**Level-wise Questions** for gradual improvement & exam readiness



**One-on-one mentorship** for Personalised Guidance



**Emphasis on both Static & Current Events** as per the evolving format

Scan QR Code for more Details & Test Schedule



**PROGRAMME FEE**  
₹ 4,500 (+GST)

TOTAL **31** TESTS

06

**SECTIONAL TESTS (GS)**  
100 QUESTIONS

05

**CURRENT AFFAIRS TESTS**  
100 QUESTIONS

20

**MOCK TESTS (GS & CSAT)**  
100 & 80 QUESTIONS



8448496262



iascore.in

## ***Section A* [MAINS]**

- ☞ France to Embed Abortion Rights in its Constitution
- ☞ Colonial Roots of 'Caste' and Its Impact on Hindu Society
- ☞ Modified PKC-ERCP River Linking Project
- ☞ The Legal Dispute Over AMU's Minority Status: A 57-Year Journey
- ☞ Pros and Cons of Simultaneous Elections in India
- ☞ UNCTAD Flags Climate Change and War as Disruptors of Global Sea Trade
- ☞ Moving Beyond Protectionism: Revitalizing India's Auto Industry
- ☞ End-to-End Encryption
- ☞ Sub-topic: Environmental Degradation and Conservation
- ☞ Hybrid Vehicles and Sustainable Mobility
- ☞ Status Report of Snow Leopards in India

## FRANCE TO EMBED ABORTION RIGHTS IN ITS CONSTITUTION

**Context:** France's National Assembly recently passed a crucial bill aimed at safeguarding a woman's right to abortion within the French Constitution.

### Background:

- ◆ This legislative move follows concerns about the **erosion of abortion rights in the United States**.
- ◆ The proposal marks a pivotal moment in the ongoing battle for **women's reproductive freedom**.
- ◆ The National Assembly's resounding approval of the bill, with 493 votes in favor and 30 against, underscores the nation's commitment to **upholding women's rights**.
- ◆ The proposed constitutional amendment, which Macron's government is pushing for, **seeks to explicitly state that the law determines the conditions under which women can exercise their freedom to choose abortion**.

### Legislative Process:

- ◆ The constitutional amendment, as outlined in **Article 34 of France's constitution**, requires approval from both the National Assembly and the Senate.
- ◆ Government aims to secure the **three-fifths majority in a joint session of parliament**, avoiding the need for a referendum.
- ◆ While the bill's support is **robust in the National Assembly, uncertainties loom in the Senate**, particularly among some conservative members critical of the proposed wording.

### Abortion in France: A Legal Landscape:

- ◆ France **decriminalized abortion in 1975**, but the absence of constitutional backing leaves the right vulnerable.
- ◆ The government's argument emphasizes the **need for constitutional protection**, especially in the wake of the U.S. Supreme Court's 2022 decision overturning a longstanding abortion ruling.
- ◆ The French legislation also highlights concerns about **global trends that seek to impede women's reproductive freedom**.

### International Context:

- ◆ The introduction to the French bill draws attention to similar challenges worldwide, citing **Poland's controversial abortion law changes in 2020**.
- ◆ **The Polish constitutional court's decision restricted abortion rights**, sparking protests in the country.
- ◆ The French **government underscores the importance of fortifying women's reproductive rights** in the face of opposition and challenges observed not only in the U.S. but also across Europe.

### Ethical Discourse

- ◆ Access to health services and the right to make a decision about managing the pregnancy or obtaining an abortion has a lot to do with individual rights. This conservative approach of the state has the potential of causing irreversible damage to female health and it can also be seen as an infringement of women's rights.
- ◆ It has become a contentious issue all over the world. Everybody is in a bit of a predicament whether a mother has a right to terminate her pregnancy at any time she wishes or an unborn child has a right to life.
- ◆ The law prohibits abortions once cardiac activity gets detected in the embryo, which usually occurs around the sixth week of pregnancy. Most women do not know they are pregnant at that point as it's the early stage of pregnancy. So, it becomes relevant to unearth the Abortion Ethics, which often gets ignored or subjected to misinterpretations.

### Reasons women give for wanting abortions, worldwide:

- ◆ disruption of education or employment
- ◆ lack of support from father
- ◆ desire to provide for existing children
- ◆ poverty, unemployment or inability to bear children



- ◆ interrelation problems with husband or partner
- ◆ a women's feels that she is too young to have a child

### The morality of Abortion:

- ◆ Many of us do believe that at least a few abortions are immoral but the law should not restrict choice in this realm. For example, if abortion is permissible when a pregnancy is due to rape or incest, **that's hardly a general right to abortion or a choice gives to a female.**
- ◆ Cardiac activity in a foetus is often considered a sign of potential life. There are chances that the cardiac activity detected on ultrasound is not a true heartbeat. It may be due to the electrical activity, and the valves of the heart may not have formed yet. And the sound of the activity does not indicate the pregnancy is viable (baby can be born and have a reasonable chance of survival). "Coercing them to find out about the pregnancy and make a decision about how to manage it in such a short window (six weeks) is contradictory to ideals of ethical care.

### Arguments for Abortion:

- ◆ A female is considered a moral person, that is entitled to rights, including the right to life. So, abortion is deemed acceptable as the foetus is not a person. **A list of criteria of personhood is identified, which includes consciousness, reasoning, activity, communication and self-awareness. A foetus undeniably is incapable of fulfilling these criteria.**
- ◆ The mother, who is a person has a right to life and it supersedes the rights of the foetus to choose whether or not it remains connected to her body.
- ◆ Also, pregnancy is assumed to be a foreseeable consequence of heterosexual intercourse, that too when there is no intention to 'have a baby'. So, denying her the right to abort the child when she was not planning for it, is unwarranted.

- **Consciousness:** perception of oneself, the external world and the ability to feel pain.
- **Reasoning:** a developed ability to solve fairly composite problems.
- **Ability to communicate:** on a variety of topics, with some profundity.
- **Self-motivated activity:** ability to choose what to do (or not to do) in a way that is not determined by genetics or the surroundings.
- **Self-concept:** see themselves or identify themselves as; e.g., female, male, athlete, Hindu, Christian, atheist, etc.

- ◆ **Abortion in self-defence:** It may be ethical for a mother to have an abortion to defend herself

from the danger to her mental or physical health than continuing with the pregnancy would cause. Abortion is considered in relation to the '**Doctrine of double effect**'.

- ◆ **The doctrine of double effect:** The doctrine says that if performing something morally good has a morally bad side-effect it's ethically righteous behaviour to do it provided the bad side-effect wasn't foreseeable. It holds even if you can anticipate that the bad effect would probably come off.

### Arguments Against abortion:

- ◆ '**Future like ours**' argument: Abortion is wrong because it deprives the foetus of a potential '*future like ours*'. It suggests that death is a bad thing because it deprives people of all the experiences, enjoyments, opportunities that would make up their future personal life. So, the foetus has an intrinsic potential future value and killing a foetus is wrong as killing an adult is wrong.
- ◆ **Killing people is wrong:** Killing an innocent human being is a moral wrong. Those who are against abortions believe that human life begins at conception, and by drawing the same analogy, the foetus is an innocent human being. So, killing the foetus is wrong and abortion is always wrong.

### It's her right whether to bring the pregnancy to term or abort it:

- ◆ Abortion concerns the autonomy and dignity of the pregnant woman herself. "Autonomy" derives from Greek and means, literally, "self-rule". If a woman who is pregnant wishes to stop being pregnant, it cannot be taken away from her.
- ◆ Attitudes to pregnancy are, however, intertwined with how society views sex, women, and the fertile woman specifically. Pregnancy and birth are not trivial inconveniences, such as having a headache. They constitute a major life event, which even when are desired causes immense discomfort and disruption to many women.
- ◆ While pregnancy increases the personal responsibilities of a woman it does not plummet her prerogative to decide whether or not to undergo medical treatment. **Her right is not diminished merely because her decision to exercise it may appear morally contrary to the existing or imposed beliefs of the society.**
- ◆ The decision of whether or not to bear a child is central to a woman's life, to her well-being and dignity. She ought to be the one deciding it for herself. When Government superintends that decision for her, she is being treated as less than a fully adult human accountable for her own choices. We need

to bestow much greater support to women who may want to conceive and raise their children, but opting out of it for financial, psychological, health, or relationship reasons Criminalising abortion does not stop abortions, it just makes abortion more unsafe.

## COLONIAL ROOTS OF 'CASTE' AND ITS IMPACT ON HINDU SOCIETY

**Context:** Caste remains persistent in India. Therefore, the historical origins of the concept of 'caste' in India and its portrayal as an inherent social structure remains vital. It needs the exploration of the influence of Christian European missionaries during colonial times in shaping perceptions of Hindu society and the implications of this lens on contemporary discourse.

### Missionary-Colonial Roots:

- ◆ The missionary-colonial influence on 'caste' classifications, these lenses distorted the **pre-existing varna-jati complex**.
- ◆ Drawing parallels with European misrepresentations of other cultural aspects, **the 'caste,' along with Devadasi, Sati, and Jagannath Rath Yatra, served as tools to malign Hindu society.**

### International Context:

- ◆ The **missionary-colonial misrepresentation** and its links to a broader global pattern is marked by the continuity of thought, action, and outcomes observed in Christian-dominated societies across continents.
- ◆ This perspective sheds light on **the systematic distortion of Hinduism** and Indian culture for justifying intervention.

### Distortion in Other Aspects:

- ◆ Works on Devadasis and Sati, suggests that **misrepresentations were not confined to 'caste'** alone.
- ◆ Examples from history reveal a **concerted effort to dehumanize and proselytize**, raising questions about the reliability of early scholarly literature.

### Contemporary Impact:

- ◆ The **acknowledgment of distortion** is not an endorsement of casteism; instead, it is a call to understand the system before distortion.

- ◆ Addressing contemporary social challenges requires **original and culture-rooted solutions**, as opposed to applying a Christian colonial template that perpetuates caste discourse.

### Mulish Resistance to Research:

- ◆ Despite **calls for the "annihilation of caste"**, a resistance to research and comprehend the distinctions between the **varna-jati complex and 'caste/tribe' classifications** need a relook.
- ◆ This **intellectual reluctance, spanning beyond political ideologies, hinders** progress in addressing societal challenges.

## MODIFIED PKC-ERCP RIVER LINKING PROJECT

**Context:** Rajasthan and Madhya Pradesh, in collaboration with the Union Ministry of Jal Shakti, have recently entered into a Memorandum of Understanding (MoU) to implement the Modified Parbati-Kalisindh-Chambal-ERCP (Modified PKC-ERCP) Link Project.

- ◆ **Crucial River link:** This strategic initiative aims to integrate the **long-pending PKC river link project with the Eastern Rajasthan Canal Project**, aligning with the national perspective **plan of interlinking rivers (ILR)** under the Government of India's program.

### Background:

- ◆ The **Parbati-Kalisindh-Chambal (PKC)** link project, initially conceptualized in 1980, is part of the National Perspectives Plan.
- ◆ Rajasthan proposed the **Eastern Rajasthan Canal Project (ERCP) in 2019**, with the Task Force for Interlinking of Rivers approving its merger with the PKC link project in December 2022.
- ◆ The ERCP focuses on **intra-basin water transfer** within the Chambal basin to address water deficits in several districts of eastern Rajasthan.

### Modified PKC-ERCP Project:

- ◆ The Modified PKC-ERCP is an **inter-state river linking project** currently in the Detailed Project Report (DPR) preparation phase.
- ◆ The **Memorandum of Agreement (MoA) among Rajasthan, Madhya Pradesh, and the Centre** will address aspects like water sharing, cost and benefit distribution, implementation mechanisms, and water management in the Chambal basin.

### The PKC Link Project:

- ◆ The PKC link project, part of the **National Water Development Agency's plan**, involves diverting water from the Kalisindh tributary and river Newaj to the Chambal River.
- ◆ Rajasthan proposed **merging the ERCP with the PKC project in 2019**, leading to its approval in December 2022.

### The ERCP:

- ◆ The Eastern Rajasthan Canal Project focuses on **transferring surplus monsoon water from Kalisindh, Parvati, Mej, and Chakansubbasins to water-deficient sub-basins of Banas, Gambhiri, Banganga, and Parbati**.
- ◆ **Thirteen districts in eastern Rajasthan are set to benefit** from this project by receiving drinking and industrial water.

### Benefits of the Modified Project:

- ◆ The Modified PKC-ERCP project aims **to provide drinking and industrial water to 13 districts** in eastern Rajasthan and the Malwa and Chambal regions of Madhya Pradesh.
- ◆ Additionally, it plans to irrigate over **5.6 lakh hectares, enhancing water security in both states**.

### Necessity of the MoU:

- ◆ The Union Jal Shakti Ministry highlights that the **Detailed Project Report (DPR)** submitted by the Rajasthan government for the ERCP did not adhere to the prevailing norms, planning for 50% dependable yield instead of the required 75%.
- ◆ Following discussions and proposals, the **Modified PKC link project was formulated to address these concerns and ensure the project's viability**.

#### River Interlinking projects in India

- The Inter-link project has been split **into three parts**:
- a northern Himalayan rivers inter-link component,
- a southern Peninsular component and starting in 2005, and
- an intrastate river linking component.
- The project is being managed by India's National Water Development Agency **Ministry of Jal Shakti**.
- NWDA has studied and prepared reports on **14 inter-link projects** for the Himalayan component, **16 inter-link projects for the Peninsular component**, and **37 intrastate** river linking projects.

- ◆ The Modified PKC-ERCP River Linking Project represents a collaborative effort to optimize water resources, providing significant benefits to eastern Rajasthan and the Chambal regions of Madhya Pradesh. The MoU and subsequent agreements pave the way for a comprehensive and sustainable approach to interlinking rivers, contributing to water security and agricultural development in the region.

### Need of interlinking rivers

- ◆ Drought, floods, and shortage of drinking water
- ◆ Population and food security
- ◆ Salt export needs
- ◆ Navigation
- ◆ Current reserves and loss in groundwater level

### Concerns associated

- ◆ Ecological and environmental issues
- ◆ Displacement of people and fisheries profession
- ◆ Poverty and population issues
- ◆ Lack of technological developments
- ◆ Inter-state political views

### Some major river linking projects in India

- ◆ Par-Tapi-Narmada link project
- ◆ Mahanadi Godavari link project
- ◆ Ken-Betwa link project (KBLP)

## THE LEGAL DISPUTE OVER AMU'S MINORITY STATUS: A 57-YEAR JOURNEY

**Context:** The recent controversy over the minority status of Aligarh Muslim University (AMU), has evoked strong reactions. It has raised debate around historical developments, constitutional provisions, and the current judicial discourse.

### Background:

#### Founding and Evolution of AMU:

- ◆ In 1877, Sir Syed Ahmed Khan established **Muhammadan Anglo-Oriental College (MAO College) in Aligarh** to address Muslim educational backwardness and preserve Islamic values.
- ◆ **The Aligarh Muslim University Act, 1920 (AMU Act)** was enacted, incorporating MAO College and the Muslim University Association into AMU.

**Key Amendments and Changes:**

- ◆ In 1951, amendments removed compulsory religious education and exclusive Muslim representation mandates.
- ◆ Further amendments in 1965 redistributed powers among various bodies, reducing the exclusive powers of the University Court.
- ◆ The legal dispute began in 1967 when the Supreme Court (SC) reviewed these amendments in the **S. Azeez Basha versus Union of India (UOI) case**.

**The Legal Dispute:****Arguments Regarding Minority Status:**

- ◆ **Article 30(1)** of the Constitution grants religious and linguistic minorities the right to establish and administer educational institutions.
- ◆ The **1967 SC bench held that AMU was not established** or administered by the Muslim minority, leading to nationwide protests.
- ◆ **The AMU Act was amended in 1981** to reaffirm the university's minority status, which was contested in subsequent legal battles.

**Reservation Controversy:**

- ◆ In 2005, AMU reserved 50% of postgraduate medical seats for Muslim candidates.
- ◆ The Allahabad High Court struck down the reservation policy in **Dr Naresh Agarwal vs UOI (2005)**, considering the 1981 amendment ultra vires.

**Current Status in the Supreme Court:****Critical Issues Under Consideration:**

- ◆ The SC, led by Chief Justice of India D.Y. Chandrachud, is addressing two crucial issues: the **criteria for determining minority status and whether an institution under statute can enjoy such status**.
- ◆ The petitioners argue for AMU's entitlement to minority status, citing the **T.M.A Pai Foundation verdict**.
- ◆ The UOI endorses the **S. Azeez Basha verdict**, questioning the establishment and administration of AMU by the Muslim minority.

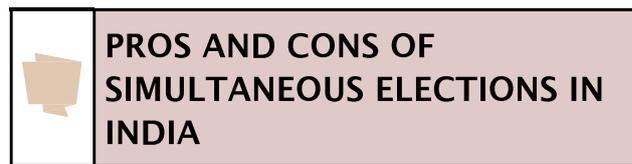
**Legal Arguments in the SC:**

- ◆ Senior Advocates argue that Statutory regulations or **state aid**, as received by AMU, do not strip an educational institution of its minority character.
- ◆ Solicitor General contends that AMU, **having surrendered rights to the British government and assumed a secular character**, should not retain minority status.

- ◆ Chief Justice emphasizes that **AMU's political inclination does not affect its minority status**.

**Future Implications:**

- ◆ The SC's judgment **will set a precedent impacting the rights and legal recognition** of all minority institutions.
- ◆ The case has **far-reaching consequences for the interpretation of Article 30(1)** and the determination of minority character in educational institutions.



**Context:** The concept of simultaneous elections for the Lok Sabha, State Legislative Assemblies, and local bodies has been under scrutiny, with a High-Level Committee (HLC) headed by former President Ramnath Kovind investigating the matter.

**Key issues:**

- ◆ This initiative, aimed at **streamlining the electoral process**.
- ◆ Debates surrounding its **impact on the federal character** of India's Constitution.

**Background:**

- ◆ Historically, during the **initial four general election cycles** from 1952 to 1967, elections to the Lok Sabha and State legislative assemblies were synchronized.
- ◆ However, due to **premature dissolutions and varying election timings**, the current system prevails.
- ◆ The idea of simultaneous elections has been **proposed by the Election Commission of India in 1982 and reiterated by the Law Commission in 1999**.

**Case for Simultaneous Elections:****Cost Efficiency:**

- ◆ Simultaneous elections offer **substantial cost savings**, estimated at around ₹4,000 crore for the Central government per Lok Sabha election. State assembly elections also incur considerable expenses.
- ◆ With parties and candidates spending significantly, **synchronized polls would alleviate financial burdens**.

**Governance and Administrative Convenience:**

- ◆ Frequent State elections keep **political parties in perpetual campaign mode**, hindering policymaking and governance.
- ◆ **The Model Code of Conduct**, enforced during elections, further restricts announcements of new schemes or projects.
- ◆ **Administrative machinery experiences slowdowns**, affecting efficiency, and paramilitary forces are redeployed, disrupting routine operations.

**Social Cohesion:**

- ◆ Annual high-stakes elections contribute to **polarizing campaigns**, especially with the influence of social media.
- ◆ Simultaneous elections could potentially **reduce divisive tactics**, fostering social cohesion in India's diverse landscape.

**Challenges Involved:**

**Federal and Democratic Concerns:**

- ◆ Simultaneous elections **may overshadow State-specific issues**, favoring national political parties and compromising the federal spirit of India.
- ◆ Elections serve as a **feedback mechanism**, and **infrequent polls could impede** effective governance and policy adjustments based on electoral feedback.

**Constitutional Amendments:**

- ◆ Conducting simultaneous polls necessitates **amendments to various articles of the Constitution, including Articles 83, 85, 172, 174, and 356**, addressing the duration and dissolution of the Lok Sabha and Legislative Assemblies.

**Recommendations:**

Reports from the Law Commission (1999) and the Parliamentary Standing Committee (2015) provide insights:

**Staggered Simultaneous Elections:**

- ◆ One proposal suggests **conducting Lok Sabha and half of the State assembly elections together**, with the remaining State assembly elections after two and a half years.
- ◆ This would **require constitutional amendments and modifications** to the Representation of the People Act, 1951.

**Deterrents for Premature Dissolution:**

- ◆ Introducing **mandatory simultaneous 'no-confidence' and 'confidence' motions** in case of premature dissolution could discourage MPs and MLAs from pushing for early elections.

- ◆ Newly constituted houses' **durations should align with the original term.**

**Clubbing Bye-Elections:**

Conducting bye-elections resulting from death, resignation, or disqualification annually could streamline the electoral process.

**International Perspectives:**

- ◆ Parliamentary democracies like **South Africa, Sweden, and Germany have fixed tenures** for their legislatures, demonstrating successful implementation of simultaneous elections and stability in governance.

**Ideal Solution:**

- ◆ Striking a balance between diverse opinions, a middle ground could involve **conducting Lok Sabha elections in one cycle and State assembly elections in another after two and a half years.**
- ◆ Implementing **recommended measures to prevent premature dissolution and streamline bye-elections** could offer the benefits of simultaneous elections without compromising democratic and federal principles.
- ◆ The debate on simultaneous elections in India requires a nuanced approach that considers the unique federal and democratic aspects of the nation. Implementing carefully crafted recommendations could pave the way for synchronized polls, enhancing efficiency and reducing costs, while safeguarding the essence of India's diverse political landscape.



**UNCTAD FLAGS CLIMATE CHANGE AND WAR AS DISRUPTORS OF GLOBAL SEA TRADE**

**Context:** The United Nations Conference on Trade and Development (UNCTAD) raises alarms about the escalating disruptions in global trade. The primary culprits behind this turmoil are identified as the dual impact of climate change and war on crucial sea lanes, specifically highlighting the Black Sea, Red Sea, and Panama Canal.

**Background:**

**Rising Tide of Concern:**

- ◆ The **UNCTAD expresses concerns** over the

mounting disturbances in global trade, emphasizing the adverse effects of climate change and conflicts on three pivotal sea routes.

- ◆ The statement, issued by the Geneva-based UN body, draws attention to a remarkable surge in container spot freight rates during the last week of December, signifying the highest-ever weekly increase.

### Unprecedented Freight Rate Surge:

- ◆ A key revelation in the UNCTAD statement is the **unprecedented surge in average container spot freight rates** from Shanghai.
- ◆ Rates have **skyrocketed by 122%**, and for the Shanghai-to-Europe route, the increase is a staggering 256%.
- ◆ The global impact becomes evident as **ships seek alternative routes, bypassing the Suez and Panama Canal.**

### Choke Points:

#### Initiation of Disruptions:

- ◆ Russia-Ukraine Conflict- led to a blockade of Ukrainian Black Sea ports, impacting the global supply of essential commodities such as wheat, sunflower oil, and maize.
- ◆ The Straits of the **Bosphorus and Dardanelles, critical choke points**, became focal areas where global trade faced significant bottlenecks.
- ◆ Black Sea Grain Initiative: Collapse of the initiative has further complicated the problems.

#### Reshaping Trade Patterns:

- ◆ **Substantial shifts in oil and grain trades, reshaping established trade patterns.**
- ◆ Simultaneously, the Panama Canal, a linchpin for global trade, faced challenges due to **reduced water levels, resulting in a significant 36% reduction** in total transits over the past month compared to the previous year.

#### Red Sea Unrest:

- ◆ The Red Sea, connecting the Mediterranean and the Indian Ocean, witnessed disruptions due to attacks by **Yemen's Houthi rebels following the Israel-Gaza Conflict.**

### Ramifications:

#### Extended Cargo Travel Distances:

- ◆ The cumulative effects of disruptions translated into extended cargo travel distances, **heightened trade costs, and increased greenhouse gas emissions.**
- ◆ Avoiding traditional routes like the Suez and Panama Canal led to **extended shipping days, elevated**

**expenses, and a surge in environmental concerns due to increased fuel consumption and CO2 emissions.**

#### Threat to Global Supply Chains:

- ◆ UNCTAD issues a stark warning that **prolonged interruptions, particularly in container shipping, pose a direct threat to global supply chains.**
- ◆ **Energy prices surge** as gas transits are discontinued, impacting energy supplies, especially in Europe.
- ◆ The crisis ripples through **global food prices, jeopardizing food security and affecting consumers and producers** alike, with developing countries being particularly vulnerable.

## MOVING BEYOND PROTECTIONISM: REVITALIZING INDIA'S AUTO INDUSTRY

**Context:** India's automobile industry, shielded by tariff walls for eight decades, needs a paradigm shift towards liberalization. The key to this turnaround is in dismantling trade barriers to unleash the true potential of the sector and foster global competitiveness.

#### Background:

- ◆ Since its inception in 1942, the Indian auto industry has operated within a **protectionist framework**, hindering its growth and denying job opportunities.
- ◆ The prevailing distorted industrial policy, marked by **high tariffs and skewed priorities, requires reevaluation.**



#### Tariff Barriers and Impact on Prices:

- ◆ Currently, a massive **125% customs duty shields all passenger vehicles**, except those designed for 10 or more persons.

- ◆ This tariff inflates the cost of an automobile, **making a \$10,000 vehicle soar to \$22,500 upon crossing the border.**
- ◆ The impact is felt domestically, **with buyers potentially paying exorbitant prices** for products that could be more reasonably priced in the global market.

### Historical Industrialization Model:

- ◆ In the **1950s, India prioritized heavy industries** over employment-intensive sectors like textiles and apparel.
- ◆ **General Motors and Ford, with assembly-only plants, were ousted,** favoring domestic companies like Hindustan Motors and Premier Motors.
- ◆ The emphasis on **heavy industries and neglect of textiles** led to a loss of competitiveness in global markets.

### Persistent Protectionism in the 1990s:

- ◆ Economic reforms in the 1990s **did not rectify the imbalance.**
- ◆ The **textile industry remained subject to exclusions, while the automobile sector enjoyed freedom from investment licensing.**
- ◆ In 2001, the automobile industry, **citing its "infant industry" status, gained protection through high customs duties.**

### Labor Laws and Changing Dynamics:

- ◆ The removal of **small-scale industry reservations in the mid-2000s did not immediately change the landscape** due to stringent labor laws.
- ◆ However, recent voices, including RC Bhargava of Maruti Suzuki, **advocate for free trade agreements (FTAs) and acknowledge the global competitiveness** of Indian car companies.

### FTA Talks and Winds of Change:

- ◆ Ongoing India-UK FTA negotiations highlight the **asymmetric patronage the automobile industry receives.**
- ◆ While **dissenting voices argue for protection, industry leaders like RC Bhargava endorse FTAs,** asserting the global competitiveness of Indian car manufacturers.

### Rejecting the "Infant" Status:

- ◆ The call is to **reject the outdated plea of "infancy"** as an excuse for inefficiency and protectionism.
- ◆ The prolonged inefficiency **has cost consumers in terms of quality and high prices,** impeding the growth of more efficient players.

### Embracing Global Competitiveness:

- ◆ The government should focus on **encouraging large-scale, efficient producers** rather than sheltering small and inefficient manufacturers behind high tariff walls.
- ◆ This shift must extend **beyond the auto industry to foster competitiveness in textiles, apparel, and other sectors.**
- ◆ India's manufacturing sector can experience substantial growth through an **outward-oriented policy.** The call is for the conclusion of FTAs with the UK and EU to open avenues for large-scale enterprises and position India as a global competitor. The time has come to move beyond protectionism and embrace a more globally integrated approach.



### END-TO-END ENCRYPTION

**Context:** The significance of information in the contemporary world is unparalleled, making its protection paramount. Encryption serves as a powerful tool in this endeavor, with end-to-end (E2E) encryption emerging as a transformative method.

### Understanding Encryption:

- ◆ Encryption, at its core, involves **transforming consumable information into an unconsumable form based on specific rules.**
- ◆ Various encryption protocols exist, such as the **Data Encryption Standard (DES), each utilizing distinct rules to secure information.**
- ◆ The key plays a **crucial role in this process,** acting as the means to 'unlock' encrypted text.

### What is End-to-End Encryption?

#### Defining E2E Encryption:

- ◆ **End-to-End encryption focuses on securing information as it traverses specific locations.**
- ◆ In scenarios like **messaging apps,** where messages pass through servers, E2E encryption ensures protection at both ends—during transit and when at rest on the server.
- ◆ The decryption occurs only when the **intended recipient accesses the message.**

#### Mechanism of Information Encryption:

- ◆ Several methods exist for encrypting information, **tailored to the required level of secrecy.**

- ◆ **Symmetric and asymmetric encryption** represent two broad categories.
- ◆ **Symmetric encryption utilizes a single key** for both encryption and decryption, while **asymmetric encryption involves separate keys**.
- ◆ **Asymmetric encryption is particularly useful when the sender and recipient differ**.

### Symmetric Encryption:

- ◆ Symmetric encryption employs a single key for both encrypting and decrypting information.
- ◆ Notable examples include the **Data Encryption Standard (DES)** and the **Advanced Encryption Standard (AES)**.

### Understanding Asymmetric Encryption:

#### Public and Private Keys:

- ◆ In asymmetric encryption, **unique keys come into play**.
- ◆ A **public key is shared openly**, while the corresponding private key remains confidential.
- ◆ The encryption, for instance, **might use the key "motorcycle," and the recipient decrypts using the agreed-upon key, such as "helmet."**
- ◆ The effectiveness of asymmetric encryption **increases with longer keys**.

#### Hash Functions in Encryption:

- ◆ Hash functions are **integral to encryption, responsible** for converting a message into an encrypted form.
- ◆ These functions must possess **specific properties, including producing unique digests for unique messages**.
- ◆ The **DES algorithm, a symmetric cipher**, employs a complex hash function involving S-boxes, demonstrating the intricate nature of encryption mechanisms.

### Can E2E Encryption Be Compromised?

#### Can E2E Encryption be 'Cracked'?

- ◆ While E2E encryption promises heightened security, potential vulnerabilities must be acknowledged. The concept of man-in-the-middle (MITM) attacks, providing insights into how attackers might exploit weaknesses to intercept and decrypt messages.
- ◆ Strategies for mitigating **MITM attacks**, such as fingerprint verification, are explored.

#### Mitigating Threats:

- ◆ Despite the promises of messaging apps with **E2E encryption, vulnerabilities exist**.

- ◆ **Man-in-the-middle (MITM)** attacks pose a significant risk.
- ◆ Preventive **measures involve fingerprint verification**, allowing users to compare unique fingerprints in a secure channel.
- ◆ However, **user complacency and susceptibility** to malware threats remain challenges.

#### Risks and Legal Considerations:

- ◆ The illegal use of **encryption backdoors or exceptions**, as revealed by whistleblowers like Edward Snowden, raises concerns.
- ◆ **Companies may install such backdoors** to comply with legal requirements, compromising the privacy assurances of E2E encryption.
- ◆ **Additionally, accessing metadata** rather than the encrypted messages becomes a potential avenue for surveillance.

### JUST TRANSITION IN PETROCHEMICALS: BHADBHUT BARRAGE COMING UP ON THE NARMADA ESTUARY IN BHARUCH

**Context:** The SardarSarovar Dam had already reduced freshwater flows to the lower Narmada; the Bhadbhut barrage will kill what is left of the river.

#### Introduction

- ◆ The tranquil village of Bhadbhut in Gujarat faces a dual crisis – the decline in fish population due to the SardarSarovar Dam (SSD) and the looming threat of the Bhadbhut barrage. As fishers witness a diminishing catch, the environmental repercussions extend to the Narmada River and the livelihoods of the local community.



## The Narmada's Transformation: Impact of SSD

### 1. Sweetwater Turns Saline

- ◆ **Reduced freshwater flow:** Construction of the SSD in 2017 led to **reduced freshwater flow** in the Narmada, affecting the livelihood of fisherfolk.
- ◆ **Decline in fish:** Bhadbhut village, where the river meets the Gulf of Khambhat, experienced a **decline in fish**, impacting the community's income.

### 2. The Hilsa Predicament

- ◆ **Hilsa Issue:** The estuary, a breeding ground for Hilsa, faces challenges due to decreased freshwater flow during the southwest monsoon.
- ◆ **Local fishers impact:** The reduction in fish during this crucial period affects the financial sustenance of the **local fishers** and the overall fish business.

## The Bhadbhut Barrage: A Bleak Outlook

### 1. Despair Amid Construction

- ◆ **Grim future:** Bhadbhut barrage, 30% complete, signals a **grim future** for fishers as they anticipate the disappearance of fish, boats, and livelihoods.

### 2. Changing Professions

- ◆ Fishermen are facing **transition to carpentry and other professions** due to the diminishing catch and uncertain future.

## Environmental and Economic Ramifications

### 1. Ecological Imbalance

- ◆ **Reduced freshwater flow** leads to an **imbalance in the estuary**, impacting the breeding ground of Hilsa.
- ◆ The **highest tidal waves** in India contribute to **seawater ingress**, affecting groundwater quality and agricultural practices.

### 2. Chemical Pollution

- ◆ **Chemical and petrochemical clusters in Bharuch** district contribute to water pollution, impacting fish taste and quality.
- ◆ Villagers face **challenges with drinking water supply** as groundwater turns saline in many areas.

## Legal Battles and Advocacy

### 1. Narmada Pollution Prevention Committee

- ◆ Appeals filed in the **National Green Tribunal (NGT)** highlight the **insufficient water release** from the SSD.

- ◆ The **NGT's referral of the case to the Supreme Court** and subsequent return to the NGT underscores the complexity of the issue.

### 2. Impact on Locals

- ◆ **Locals express concerns about floods** during monsoon due to SSD water release and saline water ingress affecting groundwater and agriculture.
- ◆ Fishermen's associations emphasize the **need for adequate water release** to mitigate environmental and livelihood challenges.

## The Bhadbhut Barrage: Justification and Critique

### 1. Purpose of Construction

- ◆ The **Bhabhut barrage aims to protect Narmada water quality** from saline ingress, prevent floods, and meet industrial water requirements.
- ◆ **Dahej's industrial growth** and the **creation of a coastal road** underscore the barrage's significance in regional development.

### 2. Environmental Concerns

- ◆ Environmental activist criticizes the **barrage as a second mistake to correct the SSD's impact**.
- ◆ **Lack of public hearings and environmental monitoring** raise questions about the long-term consequences of the barrage.

## Fisherfolk's Dilemma: Uncertain Futures

### 1. Economic Impact

- ◆ **Fisher families face unemployment risks**, with estimates suggesting that 15,000 families may be affected.
- ◆ Last year, the **Hilsa trade in Bharuch was worth Rs 1,000-1,200 crore**, emphasizing the economic stakes for fishing communities.

### 2. Changing Traditions

- ◆ **Traditional fishing livelihoods face a decline**, with the younger generation showing reluctance to enter the fishing profession.
- ◆ The **shortage of fish adds to the struggles of fishermen** and associated workers in the supply chain.

## Way Forward: A Fragile Ecosystem and Livelihoods at Stake

- ◆ The Bhadbhut saga reveals the **intricate interplay** between developmental projects, environmental conservation, and the preservation of traditional livelihoods.

- ◆ As **legal battles persist**, the fate of Bhadbhut village hangs in the balance, symbolizing the broader challenges faced by communities caught between industrial growth and ecological preservation.

## HYBRID VEHICLES AND SUSTAINABLE MOBILITY

**Context:** In the pursuit of sustainable transportation solutions, the journey towards electrification in India has encountered diverse perspectives. However, research suggests a collective embrace of hybrid vehicles as a more pragmatic and environmentally friendly option for the next 5-10 years. This shift not only aligns with India's ongoing decarbonization efforts but also reflects a shared commitment to a greener future.

### Background:

- ◆ While India's electric mobility plan predominantly focuses on battery electric vehicles (BEVs), Research highlights the practicality and lower environmental impact of **hybrid vehicles in the medium term**.
- ◆ The holistic approach considers **overall carbon emissions, emphasizing the need to balance our decarbonization drive** with feasible solutions.



### Advocacy for Hybrid Vehicles: A Shared Belief:

- ◆ Research asserts that embracing **hybrid and compressed natural gas** cars aligns with India's decarbonization goals over the next 5-10 years.
- ◆ This approach not only addresses the **cost of ownership** but also resonates with the broader objective of reducing carbon footprints collectively.

### Environmental Impact Comparison:

- ◆ The research indicates that, at present, **hybrids exhibit lower overall carbon emissions** (wheel-to-wheel) compared to both electric and traditional petrol/diesel vehicles of similar proportions.
- ◆ This suggests that, for the time being, **hybrids are at least 16% less polluting** than their electric counterparts.

### Collective Medium-Term Solution:

- ◆ The rationale behind **advocating for hybrids extends** beyond individual choices; it's a communal effort to navigate towards eventual electrification.
- ◆ Emphasis should be on **the importance of a shared journey**, not just from a cost perspective but as a crucial step in India's larger decarbonization narrative.

### Projected Timeline for Convergence:

- ◆ The research estimates that emissions from EVs and hybrid vehicles might converge **after 7-10 years**.
- ◆ This aligns with the evolving landscape of India's power generation, **where a shift to 44% non-fossil power could bridge the gap between these two technologies**.

### Global Push for Battery Electric Vehicles: Challenges and Considerations:

While the world accelerates towards battery electric vehicles, the Research underscores certain challenges that need collective consideration.

- ◆ **Upfront Subsidy:** Acknowledging the need for subsidies, the research emphasizes the importance of aligning incentives with broader societal benefits, avoiding concentration among a specific demographic.
- ◆ **Charging Network:** The emphasis is on investing in charging infrastructure, a collective responsibility that significantly influences EV adoption. India, with its unique mix of vehicles, requires a nuanced strategy.
- ◆ **Electricity Source:** The origin of electricity becomes a shared concern. In India's case, the predominant use of coal-fired thermal plants urges a collective call for transitioning to cleaner energy sources.
- ◆ **Value Chain Diversification:** The exploration of alternatives to lithium-ion batteries becomes a shared quest, reinforcing the idea of reducing dependency and nurturing a diversified, sustainable value chain.
- ◆ As India contemplates its journey towards a sustainable future, the advocacy for hybrid vehicles emerges not just as a choice but as a collective endeavor. It reflects a shared commitment to environmental stewardship, prioritizing community-

driven solutions over individual pursuits. In this collective pursuit, every choice, every initiative contributes to a greener, more sustainable tomorrow for us all.

## STATUS REPORT OF SNOW LEOPARDS IN INDIA

**Context:** Union Minister of Environment, Forest, and Climate Change, Shri Bhupender Yadav released the report on the Status of Snow leopards in India during the National Board for Wildlife meeting held in New Delhi.

### Background

- Until recent years, the **snow leopard range in India was undefined due** to a lack of extensive nationwide assessments for this vulnerable species.
- Before 2016, **approximately one-third of the range (around ca. 100,347 km<sup>2</sup>)** received minimal research attention, reduced to just 5% in pockets like Ladakh, Jammu & Kashmir, Uttarakhand, and Himachal Pradesh.
- Recent status surveys **have significantly increased understanding, providing preliminary information for 80% of the range (about 79,745 km<sup>2</sup>)**, compared to 56% in 2016.
- To gather robust information on **Snow leopard numbers**, the SPAI exercise surveyed habitats using a substantial network of camera traps.

### The program:

- The **Snow Leopard Population Assessment in India (SPAI) Program** is the first-ever scientific exercise that reports Snow leopard population of 718 individuals in India.
- The **Wildlife Institute of India (WII) is the National Coordinator for this exercise** that was carried out with support the support of all snow leopard range states and two conservation partners, the Nature Conservation Foundation, Mysuru and WWF-India.

### Coverage and Assessment

- The **SPAI systematically covered over 70% of the potential snow leopard range** in the country, involving forest & wildlife staff, researchers, volunteers, and contributions from knowledge partners.

- Covering approximately 120,000km<sup>2</sup> of crucial Snow leopard habitat across the trans-Himalayan region**, including UTs of Ladakh and J & K, and states such as Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh, the SPAI exercise was conducted from 2019 to 2023 using a meticulous two-step framework.

### 2 Step-Framework

- The first step involved evaluating Snow leopard spatial distribution**, incorporating habitat covariates into the analysis, aligning with the guidelines of the National population assessment of snow leopards in India by the Ministry of Environment, Forest and Climate Change (MoEFCC) in 2019.
- This **systematic approach included assessing the spatial distribution through an occupancy-based sampling approach** in the potential distribution range. In the second step, Snow leopard abundance was estimated using camera traps in each identified stratified region.
- During the SPAI exercise, **total efforts included: 13,450 km of trails surveyed for recording** Snow leopard signs, while camera traps were deployed at 1,971 locations for 180,000 trap nights.
- The Snow leopard occupancy was recorded in 93,392 km<sup>2</sup>**, with an estimated presence in 100,841 km<sup>2</sup>.
- A **total of 241 unique Snow leopards were photographed**.
- Based on data analysis, the estimated **population in different states are as follows:** Ladakh (477), Uttarakhand (124), Himachal Pradesh (51), Arunachal Pradesh (36), Sikkim (21), and Jammu and Kashmir (9).

### Actions:

- The report also mentions the need for establishing a dedicated **Snow Leopard Cell at WII under the MoEFCC is proposed**, with a primary focus on long-term population monitoring, supported by well-structured study designs and consistent field surveys.
- Consistent monitoring** is essential to ensuring Snow leopards' long-term survival.
- For the same, states and UTs can consider adopting a **periodic population estimation approach** (every 4th year) in the Snow leopard range.
- These regular assessments will offer valuable insights** for identifying challenges, addressing threats, and formulating effective conservation strategies.



# SAMARTH

## ANSWER WRITING PROGRAMME

Achieve *your* Foundation of Answer Writing Skill  
in **3 Months**

Scan QR Code  
for more information



PROGRAMME FEE

₹ 4999/-



Programme designed to build **Strong Foundation** for Effective Answer Writing



Gradual Improvement through **Systematically Structured Steps**



**Skill-building Sessions** for understanding basics of Answer Writing



**Theme - based Practice** through 200+ Questions selected meticulously



**Performance tests** to attain confidence to perform in examination.



**Personalised Feedback and Mentorship**

8448496262



iascore.in

**Section B [SPECIALS]**

<p><b>Topic</b></p>
<p>☞ Humboldt's Enigma</p>


**HUMBOLDT'S ENIGMA**

**Context:** The earth's tropical areas receive more sunlight, so they should be the most biodiverse places. Mountains defy this rule.

### Introduction

◆ Explorers and naturalists, including Alexander von Humboldt, have long pondered the factors influencing biodiversity, especially in mountainous regions. Humboldt's observations in South America laid the foundation for understanding the intricate relationship between temperature, altitude, humidity, and species distribution.

### Humboldt's Enigma: Mountains Defying Tropical Norms

#### 1. The Tropics and Beyond

- ◆ Tropical areas receive more solar energy, fostering greater biodiversity.
- ◆ Contrary to expectations, mountains challenge this norm by maintaining high biodiversity outside the tropics.

#### 2. Indian Perspective: Eastern Himalaya vs. Western Ghats

- ◆ While tropical areas like the Western Ghats are biodiversity hotspots, the eastern Himalaya surpasses them in diversity, especially in perching and river birds.

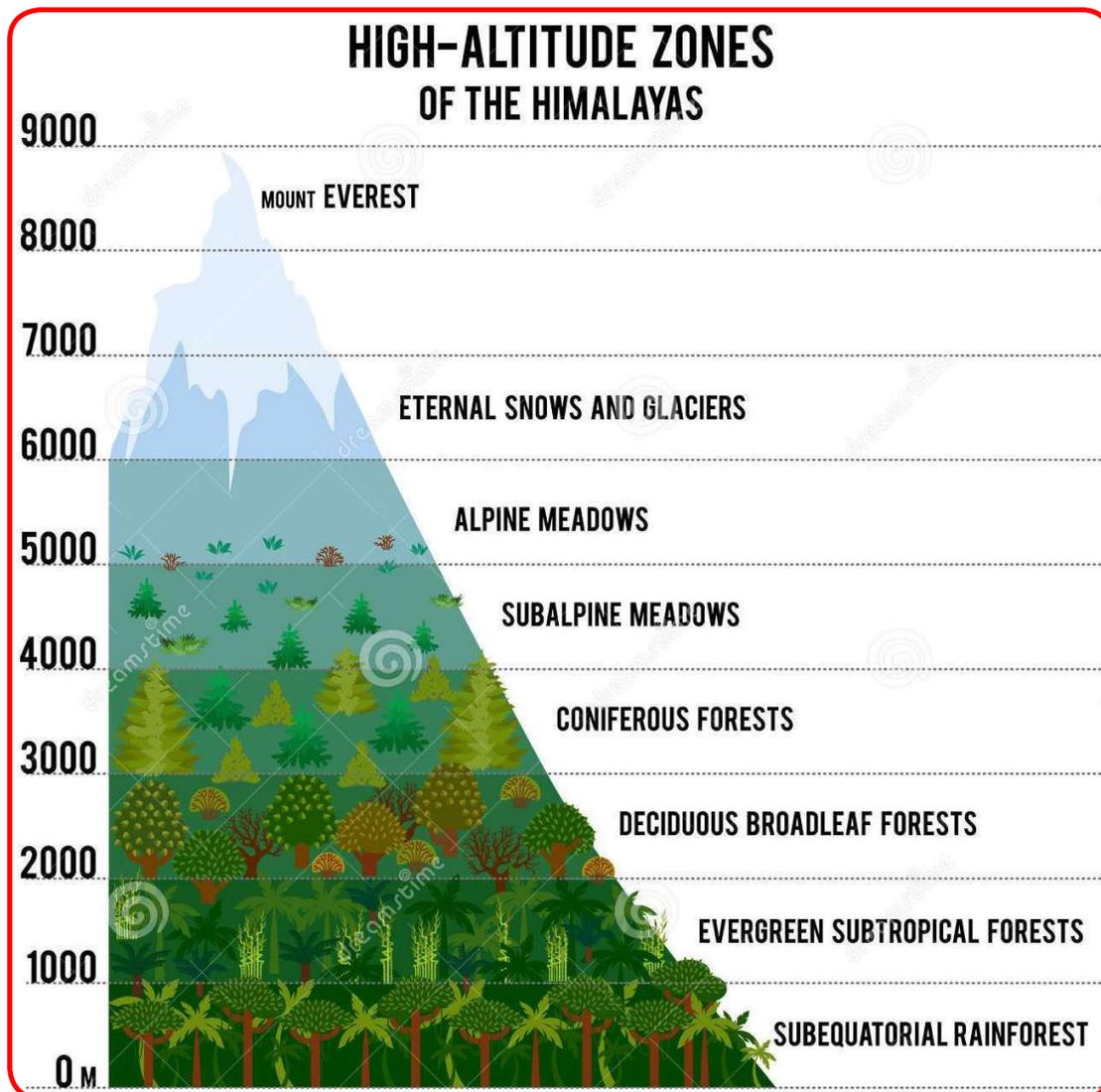
	EASTERN HIMALAYAS	WESTERN GHATS
<b>Location</b>	The Eastern Himalayas are situated in the northeastern part of India, extending across states like Sikkim, Arunachal Pradesh, and parts of Assam.	The Western Ghats run parallel to the western coast of India, spanning states like Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu.
<b>Height</b>	This region includes some of the highest peaks globally, such as Kanchenjunga, the third-highest mountain in the world.	Generally lower in elevation compared to the Himalayas, but still containing peaks over 2,000 meters.
<b>Formation</b>	Formed due to the collision of the Indian and Eurasian tectonic plates.	Formed due to the break-up of the supercontinent Gondwana and subsequent volcanic activity.
<b>Biodiversity</b>	Renowned for its rich biodiversity, with a wide variety of flora and fauna, including unique species like the red panda and the Bengal tiger.	Recognized as a biodiversity hotspot, home to numerous endemic species, including the endangered lion-tailed macaque.
<b>Cultural Significance</b>	Home to diverse ethnic communities with distinct cultures and traditions.	Features diverse ethnic communities and holds cultural importance with historic forts and temples.
<b>Rivers</b>	Numerous major rivers, including the Brahmaputra, Ganges, and their tributaries, originate in the Eastern Himalayas.	Origin of several rivers, such as the Godavari, Krishna, and Kaveri.

### Drivers of Biodiversity in Mountains

16

#### Geological Processes: Cradles and Museums

- ◆ Mountains act as 'cradles' with geological processes creating new habitats.
- ◆ Some mountains serve as 'museums,' preserving species due to climatic stability over time.



### HIMALAYAS AS MUSEUMS:

The Himalayan Mountains are indeed considered "museums" of fossils and geological evidence, providing a window into the Earth's past. The ongoing collision between the Indian and Eurasian tectonic plates that formed the Himalayas has exposed layers of rocks dating back to different geological epochs. Here are some notable examples of fossils and evidence found in the Himalayas:

#### Fossilized Marine Life:

- ◆ In the higher reaches of the Himalayas, particularly in regions like Kashmir and Ladakh, marine fossils dating back to the Tethys Sea, which once existed between the Indian and Eurasian plates, have been discovered. These fossils include marine invertebrates, indicating the ancient presence of oceans in the region.

#### Tethyan Sediments:

- ◆ The Himalayas contain extensive deposits of sediments from the Tethyan geological era, offering insights into the history of the region. These sediments often contain evidence of past environmental conditions, helping scientists reconstruct the ancient climate and ecosystems.

#### Plant Fossils:

- ◆ Fossilized plant remains, including leaves and wood, have been unearthed in the Himalayas. These fossils provide information about the flora that existed in the region during different geological periods, aiding in understanding the evolution of plant life.

**Glacial Evidence:**

- ◆ Glacial landforms and features in the Himalayas offer evidence of past glacial activity. Studying these formations helps scientists reconstruct the history of ice ages and climatic fluctuations in the region.

**Sedimentary Rocks:**

- ◆ Various types of sedimentary rocks, including shale, limestone, and sandstone, found in the Himalayas carry clues about the depositional environments and geological processes that shaped the landscape over millions of years.

**Tectonic Evidence:**

- ◆ The Himalayas are a dynamic geological zone with ongoing tectonic activity. The exposed rock formations and fault lines provide direct evidence of the intense tectonic forces shaping the region.

**Coastal Tropical Sky Islands**

- ◆ Examples like Shola Sky Islands illustrate how old lineages persist, housing ancient bird species.

**Sky Island:**

- Sky islands are isolated mountains surrounded by radically different lowland environments.
- The term originally referred to those found on the Mexican Plateau, and has extended to similarly isolated high-elevation forests.
- The isolation has significant implications for these natural habitats.
- The American Southwest region began warming up between c.20,000 and 10,000 years BP and atmospheric temperatures increased substantially, resulting in the formation of vast deserts that isolated the sky islands.
- Endemism, altitudinal migration, and relict populations are some of the natural phenomena to be found on sky islands.

**Sky Islands of Western Ghats**

- The Western Ghats are a mountain chain in southwest India home to spectacular and unique sky islands.
- The peaks of the Western Ghats, ranging between 3,000 and 8,500 feet above sea level, host an almost unbelievable array of microclimates, looking like "patches of forests floating in a sea of grasslands."

**Treasures of Shola**

- One of the specific habitats unique to the sky islands of this area is a type of low-temperature, high-humidity tropical cloud forest full of stunted trees mixed with grasslands called the Shola.
- The Shola forests of South derive their name from the Tamil word solai, which means a 'tropical rain forest'.
- Classified as 'Southern Montane Wet Temperate Forest' the Sholas are found in the upper reaches of the Nilgiris, Anamalais, Palni hills, Kalakadu, Mundanthurai and Kanyakumari in the states of Tamil Nadu and Kerala.
- These forests are found sheltered in valleys with sufficient moisture and proper drainage, at an altitude of more than 1,500 metres.

**Geological Heterogeneity**

- ◆ Mountains with diverse geological compositions exhibit higher biodiversity, especially in the tropics.

India is endowed with a diverse and complex geological framework, and its mountainous regions exhibit significant geological heterogeneity. Here are some key aspects of the geological heterogeneity in the Indian mountains:

**Himalayan Range:** The Himalayas, the youngest and tallest mountain range in the world, are primarily composed of young folded sedimentary rocks, metamorphic rocks, and intrusions of granite. The collision between the Indian and Eurasian tectonic plates led to the uplift of the Himalayas.

**Aravalli Range:** The Aravalli Range, one of the oldest mountain ranges globally, showcases ancient rocks dating back to the Proterozoic era. It contains sedimentary and metamorphic rocks, including quartzite and marble.

**Western Ghats:** The Western Ghats are characterized by a mix of different rock types, including basalt flows from volcanic activity, ancient Precambrian rocks, and sedimentary rocks. The region has diverse geological formations due to its complex geological history.

**Eastern Ghats:** The Eastern Ghats are primarily composed of ancient granites, gneisses, and other metamorphic rocks. Unlike the Western Ghats, the Eastern Ghats are not associated with extensive volcanic activity.

**Vindhyan Range:** The Vindhyan Range is known for its extensive sedimentary rock formations, including sandstone, shale, and limestone. These rocks provide insights into the ancient history of the Indian subcontinent.

**Satpura Range:** The Satpura Range exhibits a variety of rock types, including sandstone, shale, and limestone. It also contains igneous intrusions and some volcanic rocks, contributing to the geological diversity of the region.

**Deccan Plateau:** The Deccan Plateau, which includes the Deccan Traps, is characterized by extensive basaltic lava flows. The Deccan Traps resulted from volcanic activity that occurred around 66 million years ago and played a significant role in the geological history of the Indian subcontinent.

**Siwalik Range:** The Siwalik Range, the outermost range of the Himalayas, consists of unconsolidated sedimentary rocks such as sandstone, siltstone, and conglomerates. Fossils found in Siwalik rocks provide valuable information about the region's paleontological history.

### Climate Dissimilarity

- ◆ Climate differences in the eastern Himalaya contribute to its unique biodiversity.

The Western Himalayas, Eastern Himalayas, and Western Ghats are distinct geographical regions in India, each characterized by unique climatic conditions. Here are the general climate differences among these three regions:

#### Western Himalayas:

- ◆ **Temperature:** The Western Himalayas experience a wide range of temperatures due to variations in altitude. In higher altitudes, temperatures can be sub-zero during winters, while lower elevations have milder climates.
- ◆ **Precipitation:** The region receives heavy snowfall during winters, especially in the higher reaches. Monsoon rains contribute to the annual precipitation, fostering alpine meadows and dense forests.

#### Eastern Himalayas:

- ◆ **Temperature:** Similar to the Western Himalayas, temperatures in the Eastern Himalayas vary with altitude. The lower regions have a more subtropical climate, while higher elevations experience colder conditions.
- ◆ **Precipitation:** The Eastern Himalayas receive substantial rainfall during the monsoon season. This abundant precipitation contributes to the region's lush greenery and supports diverse ecosystems.

#### Western Ghats:

- ◆ **Temperature:** The Western Ghats have a predominantly tropical climate, with relatively stable temperatures throughout the year. Coastal areas have a more humid and equable climate, while higher elevations experience cooler temperatures.
- ◆ **Precipitation:** The Western Ghats are known for heavy and consistent rainfall, especially during the southwest monsoon. The high rainfall contributes to the formation of lush evergreen forests, making it one of the world's biodiversity hotspots.

- ◆ Some bird groups have evolved elsewhere and dispersed, increasing diversity.

### Bird groups of Eastern Himalayas

#### Himalayan Monal (*Lophophorus impejanus*):

- ◆ The Himalayan Monal, with its vibrant plumage, is native to the Himalayan region. Its evolutionary history is linked to the unique ecological conditions of the Eastern Himalayas, adapting to the montane forests and alpine meadows.

**Satyr Tragopan (*Tragopan satyra*):**

- ◆ This pheasant species is characterized by its striking plumage. Its evolutionary adaptations are shaped by the montane forests of the Eastern Himalayas, where it is found.

**Spiny Babbler (*Turdoides nipalensis*):**

- ◆ The Spiny Babbler is endemic to the Eastern Himalayas and is known for its distinct appearance and vocalizations. Its evolutionary history is connected to the specific ecological niches within the Eastern Himalayan forests.

**Fire-tailed Myzornis (*Myzornis pyrrhoura*):**

- ◆ This small bird with bright plumage is adapted to the dense undergrowth of the Eastern Himalayan forests. Its evolution is tied to the unique microhabitats within the region.

**Rufous-necked Hornbill (*Aceros nipalensis*):**

- ◆ Found in the Eastern Himalayas, this hornbill species plays a vital role in the ecosystem. Its evolutionary adaptations are linked to the forested environments where it resides.

**Sikkim Wedge-billed Babbler (*Sphenocichla humei*):**

- ◆ Endemic to the Eastern Himalayas, this babbler species has evolved to thrive in the understorey of dense forests. Its evolutionary history is shaped by the specific ecological conditions of the region.

**Beautiful Nuthatch (*Sitta formosa*):**

- ◆ This colorful nuthatch is found in the temperate forests of the Eastern Himalayas. Its evolutionary adaptations are connected to the montane ecosystems it inhabits.

**Gaps in Understanding: The Need for Research****1. Lack of Fine Data**

- ◆ Limited data on species occurrence hinders comprehensive understanding.
- ◆ Birds, the best-studied group, suggest mountains play a crucial role in biodiversity.

**2. Research Initiatives in India**

- ◆ National Mission on Himalayan Studies, National Mission for Sustaining the Himalayan Ecosystem, and National Mission on Biodiversity and Human Wellbeing aim to address research gaps.

**3. Importance of Modern Tools**

- ◆ Genetic studies are essential for a deeper understanding of biodiversity.
- ◆ Unexplored regions, like the Eastern Ghats, require modern tools to uncover hidden diversity.

**Way Forward: Mountains as Living Laboratories**

- ◆ Humboldt's enigma remains a captivating puzzle, urging scientists to delve into the mysteries of mountain biodiversity. National programs must be reinforced to support basic research, unveiling answers to global challenges in climate and landscape change. Our backyards, including the diverse landscapes of India, offer rich opportunities to unravel these mysteries and contribute to the broader understanding of biodiversity.



## **Section C [PRELIMS]**

To Attempt  
Weekly Current Affairs Test, Visit

**[www.iasscore.in](http://www.iasscore.in)**

- ☞ All India Survey on Higher Education (AISHE) 2021-2022
- ☞ Yuva Sangam (Phase IV)
- ☞ The Challenge of Implementing GIS-Based Master Plans
- ☞ Government Aims to Make 30 Key Cities Beggary-Free
- ☞ Strengthening India's Quality Ecosystem
- ☞ One Stop Centres Scheme
- ☞ Codifying traditional med data to boost research
- ☞ Prohibition of Child Marriage (Amendment) Bill, 2021
- ☞ Corruption Perceptions Index 2023
- ☞ National Mission for Mentoring
- ☞ India's First Private Helicopter Assembly Line
- ☞ VCM in Agriculture Sector and Accreditation Protocol of Agroforestry Nurseries
- ☞ Survey to assess women participation in workforce
- ☞ Outbreak of Western Equine Encephalitis Virus in Argentina
- ☞ New Ramsar Sites

## ALL INDIA SURVEY ON HIGHER EDUCATION (AISHE) 2021-2022

**Context:** Recently Ministry of education released All India Survey on Higher Education (AISHE) 2021-2022. It reveals significant trends regarding the progress in the education ecosystem.

### Key findings

- ◆ **Enrolment in higher education increases** to 4.33 crore in 2021-22 from 4.14 crore in 2020-21 and 3.42 crore in 2014-15 (an increase of 91 lakh students, i.e., 26.5% since 2014-15)
- ◆ **Female enrolment in Higher Education increases** to 2.07 crore in 2021-22 from 1.57 crore in 2014-15 (an increase of 50 lakh students, 32% increase)
- ◆ **GER increases** to 28.4 in 2021-22 from 23.7 in 2014-15; Female GER increases to 28.5 in 2021-22 from 22.9 in 2014-15

### Trends

- ◆ **Female GER continues to be more than male GER for fifth consecutive year** since 2017-18
- ◆ **Significant 44% increase in enrolment of SC students** since 2014-15 (66.23 lakh in 2021-22 from 46.07 lakh in 2014-15)
- ◆ **Notable increase of 51% in enrolment of Female SC Students** in 2021-22 (31.71 lakh), compared to 2014-15 (21.02 lakh)
- ◆ **Substantial increase of 65.2% in enrolment of ST students** in 2021-22 (27.1 lakh), compared to 2014-15 (16.41 lakh)
- ◆ **Remarkable 80% increase in the enrolment of Female ST Students** in 2021-22 (13.46 lakh), since 2014-15 (7.47 lakh)
- ◆ **Increase of 45% in OBC Student enrolment** in 2021-22 (1.63 crore) from 2014-15 (1.13 crore)
- ◆ **Significant 49.3% increase in Female OBC Students** in 2021-22 (78.19 lakh) since 2014-15 (52.36 lakh)
- ◆ **Total Ph.D. enrolment has increased 81.2%** in 2021-22 (2.13 lakh) from 2014-15 (1.17 lakh)
- ◆ **Female Ph.D. enrolment has doubled** in 2021-22 (0.99 lakh) from 2014-15 (0.48 lakh)
- ◆ **42.3 % increase in Female Minority Student enrolment** since 2014-15 (15.2 lakh in 2021-22 from 10.7 lakh in 2014-15)

### New Institutions and Faculties

- ◆ 341 **Universities/University level institutions** have been established since 2014-15
- ◆ **Female faculty/teachers have increased** to 6.94 lakh in 2021-22 from 5.69 lakh in 2014-15 (an increase of 1.25 lakh, i.e., 22% since 2014-15)

### About AISHE

- ◆ The Ministry of Education, Government of India releases **All India Survey on Higher Education (AISHE)**.
- ◆ The Ministry has been conducting **AISHE since 2011**, covering all Higher Educational Institutions (HEIs) in the country registered with AISHE collecting detailed information on different parameters such as student enrollment, teachers, infrastructural information, etc.

## YUVA SANGAM (PHASE IV)

**Context:** Online registrations for Yuva Sangam (Phase IV) commence for participation. More than 2870 youth across India participated in 69 tours in various phases of Yuva Sangam.

### About the initiative:

- ◆ Yuva Sangam, under **Ek Bharat Shreshtha Bharat (EBSB)** is an initiative by the Government of India to strengthen people-to-people connect between youth belonging to different States/UTs of India.
- ◆ Registrations for the events under it happen at the **YUVA SANGAM portal**.
- ◆ **Primary participants:** Interested youth in the age group of 18-30 years, mainly students, NSS/ NYKS volunteers, employed/self-employed persons



### Significance:

- ◆ Yuva Sangam aligns with key themes in the **National Education Policy (NEP) 2020** by focusing on

experiential learning and imbibing knowledge of the rich diversity of India on a first-hand basis.

- It is an ongoing cultural exchange with the **celebration of diversity at its core** wherein participants gain an immersive experience of diverse facets of life, natural landforms, development landmarks, recent achievements, and youth connect in the host state.
- Twenty-two eminent **institutions across India have been identified for Phase IV of Yuva Sangam** during which participants from these states/ UTs, led by the nodal HEI of the state/UT, respectively, will be visiting its paired state/ UTs.

### Programme:

- Under the initiative **educational-cum-cultural tours for the youth**, including on-campus and off-campus students, from one state/UT to another are organised.
- During the tours, **multi-dimensional exposure** under five broad areas which are **Paryatan** (Tourism), **Parampara** (Traditions), **Pragati** (Development), **Paraspar Sampark** (People-to-people connect), and **Prodyogiki** (Technology) is provided to visiting delegation.
- Youth across various states/UTs will visit their **paired counterpart for 5-7 days** (excluding travel days) during which they will get an immersive experience of various facets of the state and the opportunity to interact and deeply engage with the local youth.

### Key stakeholders

- It exemplifies the **'Whole of Government' approach**, includes M/o Home Affairs, Culture, Tourism, Youth Affairs & Sports, Information & Broadcasting, Department for Development of North-East Region (DoNER), and Railways.

### Previous Phases:

- The previous phases of Yuva Sangam have witnessed strong participation with registrations touching 16767, 21380, and 29151 in the three phases respectively.
- Yuva Sangam has been organized **collaboratively on the model of Kashi Tamil Sangamam (KTS)** and has garnered immense response and participation from all corners of India.
- More than 2870 youth across India have participated in 69 tours in various phases of Yuva Sangam.**
- It has infused the spirit of volunteerism in the youth of the nation with Yuva Sangam delegates contributing extensively in the NEP Celebrations and Akhil Bhartiya Shiksha Samagam held in Delhi in July 2023, Azadi Ka Amrit Mahotsav celebrations, Meri Maati Mera Desh campaign and various other nation building activities.

## THE CHALLENGE OF IMPLEMENTING GIS-BASED MASTER PLANS

**Context:** Over 200 Class-I cities in India, including Shimla and Imphal, have recently notified Geographic Information System (GIS)-based master plans as part of the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) mission.

### Background:

- The Supreme Court's approval of the **Shimla Development Plan**, after 44 years, and Manipur's notification of a **flood-prone capital city plan** marked significant milestones.
- These initiatives are part of the larger **AMRUT mission, initially launched in 2015 and relaunched in 2021**, aiming to have over 1,000 cities with GIS-based master plans.

### Significance of GIS-Based Master Plans:

- GIS-based master plans involve **mapping the entire existing infrastructure, providing a comprehensive vision for a city's development** over the next two decades.
- It includes regulations for **land use, building construction, transport, green spaces, and economic development**.

### Challenges in Master Plan Implementation:

- Urban development experts argue that master plans, despite being critical, often remain **unimplemented**, leading to unauthorized development in cities.
- The **rapid urbanization and poor enforcement** of these plans have contributed to issues like unregulated construction and environmental concerns.

### Unregulated Development and Climate Impact:

- The **absence of master plans in 65% of urban settlements**, as highlighted by NITI Aayog, leads to piecemeal interventions, haphazard constructions, and environmental pollution.
- This is particularly significant in **hill states like Himachal, prone to flash floods and landslides**.

### AMRUT's Role in Addressing Challenges:

- AMRUT's **sub-scheme focuses on using technology to prepare master plans**, utilizing GIS data to

address challenges arising from urbanization and climate change.

- ◆ The baseline maps, created using **satellite imagery or drones**, form the foundation for future plans related to transportation, economic activities, and social infrastructure.

### The Implementation Challenge:

- ◆ While the emphasis is on planning for **the next two decades, experts stress that the real challenge** lies in implementation and having an enforceable legal framework.
- ◆ The lack of **strict enforcement and accountability** has hindered the success of master plans in many cities.

### Incentives and Recruitment Drive:

- ◆ **Approximately 1500 Class-I towns have only around 10% with valid master plans.**
- ◆ However, with the central government providing **incentives and focusing on recruiting urban planners**, there is a positive shift.
- ◆ Cities are now receiving **funds as incentives for preparing master plans**, marking progress on the ground.
- ◆ While GIS-based master plans represent a crucial step toward planned urban development, the success hinges on effective implementation and a robust legal framework. The current momentum, driven by incentives and recruitment initiatives, offers hope for more cities to adopt and enforce comprehensive master plans.



### GOVERNMENT AIMS TO MAKE 30 KEY CITIES BEGGARY-FREE

**Context:** The Ministry of Social Justice and Empowerment has outlined a plan to make 30 significant cities, spanning from Ayodhya to Guwahati, Trimbakeshwar to Thiruvananthapuram, beggary-free by 2026.

- ◆ **Initiative:** This comprehensive effort under the 'Support for Marginalised Individuals for Livelihood and Enterprises' (SMILE) scheme targets the survey and rehabilitation of individuals engaged in begging, particularly women and children.

### Background:

- ◆ The SMILE scheme, launched on **February 12, 2022**, allocates Rs. 365 Crore from 2021-22 to 2025-26.

- ◆ It encompasses two sub-schemes **aimed at providing welfare and rehabilitation** for the transgender community and individuals engaged in begging.



### Survey and Rehabilitation Initiative

- ◆ The government has selected 30 cities, including **Ayodhya, Guwahati, Trimbakeshwar, and Thiruvananthapuram**, for focused efforts to eradicate beggary.
- ◆ This initiative aligns with the national goal of achieving a 'Bhiksha Vritti Mukta Bharat.'
- ◆ The ministry plans to **support district and municipal authorities** in identifying beggary 'hotspots' through uniform survey and rehab guidelines.
- ◆ The goal is to create a **national portal and mobile app** by mid-February, ensuring real-time updates on identified individuals engaged in begging.
- ◆ Out of the 30 cities, **25 have submitted action plans, while consent is awaited from Kangra, Cuttack, Udaipur, and Kushinagar.**
- ◆ Notably, **Sanchi reported no individuals engaged in begging**, prompting consideration for a different city.
- ◆ **Kozhikode, Vijayawada, Madurai, and Mysuru** have already completed their surveys.

### SMILE Scheme: Support for Marginalised Individuals for Livelihood and Enterprise

- ◆ The SMILE scheme primarily targets the welfare and rehabilitation of the **transgender community and individuals engaged in begging.**

### Benefits of the Scheme:

- ◆ **Scholarships:** Transgender students from IX to post-graduation receive scholarships to support their education.
- ◆ **Skill Development:** The scheme incorporates skill development and livelihood opportunities under the PM-DAKSH scheme.

- ◆ **Health Support:** Comprehensive medical health packages, in collaboration with PM-JAY, include support for gender-affirmation surgeries.
- ◆ **Housing Facility:** 'Garima Greh' ensures food, clothing, recreation, skill development, and medical support for the transgender community and individuals engaged in begging.
- ◆ **Transgender Protection Cell:** Each state will establish a protection cell to monitor and address offenses promptly.
- ◆ **National Portal & Helpline:** Providing necessary information and solutions to beneficiaries when needed.

### Comprehensive Rehabilitation Sub-Scheme:

- ◆ Focusing on **survey, identification, mobilization, rescue/shelter home, and comprehensive resettlement**, this sub-scheme aims to address the root causes of beggary and reintegrate individuals into mainstream society.



## STRENGTHENING INDIA'S QUALITY ECOSYSTEM

**Context:** The Government of India, led by the Department for Promotion of Industry and Internal Trade (DPIIT), is undertaking a mission to establish a robust quality ecosystem. With a focus on safety-compliant products, the introduction of Quality Control Orders (QCOs) is a strategic move to elevate India's position in global manufacturing while ensuring consumer safety.

### Background:

- ◆ India's pursuit of a quality-centric ecosystem aligns with the vision for "Made in India" products to be globally recognized for their excellence.
- ◆ The DPIIT's efforts involve the rapid implementation of QCOs, specifically targeting critical products affecting consumer safety, including Electrical Accessories, Laboratory Glassware, Hinges, Copper Products, and Door Fittings.

### Mission for Quality:

#### Vision:

- ◆ "Made in India" product should instill global confidence in its **unmatched quality**.
- ◆ This aspiration is integral to the **overarching goal**

of achieving excellence in all facets, from products and services to institutions and decision-making processes.

### Technological Shift and Consumer Awareness:

- ◆ In an era of advancing technology, consumers are increasingly vigilant about safety standards, performance parameters, and product durability.
- ◆ A balance between **product quality, pricing, and innovation is crucial**, prompting consumers to scrutinize product quality reviews before making purchases.

### Implementing Quality Control Orders (QCOs):

#### Policy Focus on Safety:

- ◆ To reinforce strong quality standards and enhance consumer product safety, DPIIT places unprecedented **policy emphasis on the implementation of QCOs**.
- ◆ This aligns with the **Technical Barriers to Trade (TBT)** Agreement of the World Trade Organisation (WTO), allowing countries to take essential quality control measures.

### Benefits of QCOs:

- ◆ The implementation of QCOs is a **strategic move with multifaceted advantages**, including acquiring a larger share of the global manufacturing market, preventing sub-standard product circulation, attracting investments, and averting potential accidents.
- ◆ QCOs facilitate early detection of **product defects, benefiting both manufacturers and consumers by rationalizing costs**.

### Role of Bureau of Indian Standards (BIS):

- ◆ BIS, as the **National Standard Body of India**, plays a pivotal role in standardization, marking, and quality certification.
- ◆ While **BIS standards are voluntary, QCOs notified by the Central Government are mandatory**, emphasizing safety standards and conformity assessments.

### Recent Developments and Focus Areas:

#### More Than 60 New QCOs:

- ◆ DPIIT's efforts have resulted in the issuance of over **60 new QCOs** covering approximately 300 product standards.
- ◆ These QCOs not only ensure reliable products for consumers but also elevate manufacturing quality

standards, enhancing the brand value of “**Made in India**” products.

### Recent QCOs:

- Recent QCOs have been introduced for critical products like ‘**Steel Wires/ Strands, Nylon Wire Ropes and Wire Mesh, ‘Hinges,’ ‘Safes, Safe Deposits Locker Cabinets and Key locks,’ ‘Laboratory Glassware,’ and ‘Electrical Accessories.’**
- These products, **prevalent in households**, demand well-defined standards for consumer safety.

### Implementation Process of QCOs:

#### Comprehensive Approach:

- The implementation of QCOs involves **DPIIT’s engagement with stakeholders, consultations with BIS, industry feedback, legal vetting, WTO comments solicitation, and final approval from relevant Central Government authorities.** Special considerations for Micro and Small Industries are envisaged to facilitate smooth implementation.

#### BIS Enforcement:

- BIS enforces QCOs through the **Grant of License and/or Certificate of Conformity.** **Post-QCO notification, the manufacturing, storing, and sale of non-BIS certified products** are prohibited, with violations attracting penalties under the BIS Act.

#### Industry-Government Partnership:

##### Stakeholder Consultations:

- DPIIT fosters a strong industry-government partnership by conducting **regular consultations** with industry members, sectoral associations, and stakeholders.
- This ensures that issued QCOs align with **industry needs, leading** to smoother implementation.

##### Awareness Initiatives:

- Post-QCO notification, DPIIT undertakes initiatives to **raise awareness about the newly implemented QCOs, fostering a sense of ownership and adherence** to standards across industries nationwide.

#### Future Prospects and Prime Minister’s Vision:

##### ‘Zero Effect, Zero Defect’ and ‘Vocal for Local’:

- As India aims for **‘Zero Defect’** aligned with global standards and **‘Zero Effect’** emphasizing environmental sustainability, QCOs play a pivotal role.

- With the **“Vocal for Local” initiative** resonating, QCOs contribute to the development of world-class products, supporting an **‘Aatmanirbhar Bharat.’**

#### Balancing Global Standards:

- Striking a balance **between ‘Zero Defect’ and ‘Zero Effect,’** QCOs are instrumental in enhancing the credibility and value of Indian products globally.
- Adherence to **safety standards** is central to building consumer trust and promoting homegrown brands.

## ONE STOP CENTRES SCHEME

**Context:** Success of One Stop Centres in aiding women facing violence, with more than 700 centers established across India. On the 32nd foundation day of the National Commission for Women (NCW), the significant impact of these centers was highlighted along with the crucial role of the NCW’s 24x7 helpline for women.

#### Background:

- The **One Stop Centre initiative, under the Women and Child Development Ministry** and funded through the Nirbhaya Fund, aims to offer comprehensive support to women encountering violence in both public and private spaces, including domestic violence.
- The **NCW plays a pivotal role** in fostering conditions that enable women to actively participate in social, economic, and political activities.

#### One Stop Centre Scheme:

- The One Stop Centre Scheme, a **centrally sponsored scheme** of the Ministry of Women and Child Development, addresses violence against women.
- Established **under the Nirbhaya Fund, these centers provide integrated assistance**, featuring administrators, case workers, medical personnel, legal counselors, and other support staff.
- The One Stop Centre Scheme operates under the umbrella scheme for the **National Mission for Empowerment of Women, including the Indira Gandhi Matritrav Sahyaog Yojana.**
- It receives funding from the Nirbhaya Fund, with the central government providing 100% financial assistance to state governments and union territories.
- The scheme aligns with recommendations from the **12th Plan Working Group on Women’s Agency and Empowerment and the Usha Mehra**

**Commission**, aiming to provide a comprehensive response to gender-based violence in India.

**Achievements and Impact:**

- ◆ These One Stop Centres have assisted more than **8.3 lakh women to date**.
- ◆ The services offered **include emergency response, medical assistance, legal aid, counseling, shelter, and more, all aimed at creating a supportive environment for women facing violence**.
- ◆ **NCW's 24x7 Helpline:** It plays a vital role in providing immediate assistance to women in distress. The helpline complements the One Stop Centres, collectively contributing to women's safety and well-being.

**CODIFYING TRADITIONAL MED DATA TO BOOST RESEARCH**

**Context:** Recently the prime minister talked about the new coding system in Traditional medicine practices to improve health governance in AYUSH sector.



- ◆ **Issue:** Most doctors practicing **traditional systems of medicine - ayurveda, unani or siddha - follow their own style** to write name of a disease and methods of treatment, making it difficult for a patient to approach another doctor for follow-up.

**New approach:**

- ◆ Ministry of **Ayush, with help from WHO** is codifying terminology related to diseases and treatment offered in these systems of medicine.
- ◆ This will **help doctors follow the same pattern while writing prescriptions**.

**Benefits:**

- ◆ One advantage of this will be that if **one goes to another doctor with that slip**, they will get complete

information from just that slip - from the illness, treatment, medication prescribed, and duration of treatment to one's allergies.

- ◆ Another benefit will be to those **associated with research work**.
- ◆ **Scientists from other countries will also get complete information** about a disease, medicines and their effects.
- ◆ As the **research expands and scientists come together**, these medical systems will yield better results and people's inclination towards them will rise.

**Progress so far:**

- ◆ The ministry said **groundwork for codifying diseases and treatment** under various forms of traditional systems of medicine was created during the 2017 Ayurveda Day celebrations when National Ayush Morbidity and Standardised Terminologies Electronic (NAMASTE) portal was launched.
- ◆ Data and terminology related to diseases based on ayurveda, siddha and unani medicine have been included in WHO ICD-11 classification.
- ◆ This will open up possibilities of **large-scale scientific evidence generation in Ayush sector** and increased credibility of its usage across the globe.
- ◆ The ICD classification will also **help in medical insurance coverage, creation of insurance packages** and insurance portability, and boost medical value travel for Ayush care.

**AYUSH Grid**

- ◆ AYUSH Grid, initiated by the Ministry of AYUSH, **aims to bring onboard all AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy)** facilities including hospitals and laboratories and to promote traditional systems of healthcare.
- ◆ The Ministry of AYUSH and Ministry of Electronics and Information Technology have already **inked a pact to collaborate with each other for the digitisation of the AYUSH sector**.

**NAMASTE Portal**

- ◆ National AYUSH Morbidity and Standardized Terminologies Electronic Portal (**NAMASTE Portal**) was launched on 17th October, 2017 (2nd Ayurveda day).
- ◆ The portal provides **standardized terminologies & morbidity codes** for Ayurveda, Siddha and Unani systems of medicines.
- ◆ **Morbidity codes provide a comprehensive classification of diseases** described in the traditional medicines system.

## PROHIBITION OF CHILD MARRIAGE (AMENDMENT) BILL, 2021

**Context:** A parliamentary committee is granted another extension to review the Prohibition of Child Marriage (Amendment) Bill, 2021, which aims to increase the minimum age of marriage for women from 18 to 21. The impending end of the Lok Sabha's tenure in June adds urgency to the committee's task, raising questions about the fate of the bill.

### Background:

- ◆ The Prohibition of Child Marriage (Amendment) Bill, 2021, introduced in the Lok Sabha in December 2021, seeks to address the issue of child marriage by raising the minimum age for women.
- ◆ The parliamentary committee responsible for its examination has received several extensions, with the current extension granted until May 2024.

### Examining the Bill:

- ◆ The Prohibition of Child Marriage (Amendment) Bill, 2021, aims to amend the Prohibition of Child Marriage Act, 2006, and increase the minimum age of marriage for females to 21 years.
- ◆ The bill emphasizes overriding any existing laws, customs, or practices related to marriage.

### Key Amendments:

#### 1. Age of Marriage Increase:

- ◆ The Bill proposes raising the minimum age of marriage for females from 18 to 21 years, aligning it with the age of majority.

#### 2. Annulment Period Extension:

- ◆ Under the 2006 Act, individuals married below the minimum age can apply for annulment within two years of attaining majority. The Bill extends this period to five years, allowing annulment before the age of 23.

### Key Issues and Analysis:

#### Age Discrepancy:

- ◆ The proposed minimum age of marriage at 21 is higher than the minimum age of majority, which is 18.

- ◆ The Supreme Court's recognition of marriage between adults as a fundamental right prompts questions about whether restricting marriage for individuals aged 18 to 21 is a reasonable limitation on their right to marry.

### Impact on Child Marriage:

- ◆ Despite the minimum age of marriage being 18 since 1978, around a quarter of women aged 20-24 are married before turning 18.
- ◆ This prompts a critical examination of whether increasing the minimum age would significantly reduce the incidence of child marriage.

### Committee's Challenges:

- ◆ With the Lok Sabha's tenure ending in June 2024, there is a looming concern about the fate of the Prohibition of Child Marriage (Amendment) Bill, 2021.
- ◆ The parliamentary committee faces the challenge of ensuring a thorough examination and producing a report before the legislative body dissolves.
- ◆ The examination of the Prohibition of Child Marriage (Amendment) Bill, 2021, holds significance in addressing the persistent issue of child marriage in India. The parliamentary committee's diligence in reviewing the bill and presenting a comprehensive report will play a crucial role in shaping legislative decisions and contributing to the broader goal of safeguarding the rights and well-being of young women.

## CORRUPTION PERCEPTIONS INDEX 2023

**Context:** In the recently released Corruption Perceptions Index, 2023 by the Transparency International India's standing in the Corruption Perceptions Index remained relatively stable at 93 out of 180 countries.

- ◆ **The Index:** It sheds light on the nation's perceived levels of public sector corruption.

### 2022 vs 2023

- ◆ In 2022, India secured the 85th position with an overall score of 40.
- ◆ However, in 2023, the country's score slightly dropped to 39, signaling concerns about corruption levels.
- ◆ The Corruption Perceptions Index utilizes a scale of 0 to 100, with 0 representing high corruption and 100 indicating a very clean environment.

### India and Corruption Perceptions Index 2023:

- ◆ The report notes that India's modest fluctuation in scores **doesn't permit firm conclusions regarding any significant change**.
- ◆ However, it highlights a narrowing civic space leading up to the elections, **emphasizing the potential threats to fundamental rights posed by recent legislative actions**, such as the telecommunication bill.



### South Asia's Landscape:

- ◆ In South Asia, the report points out **challenges faced by Pakistan (133) and Sri Lanka (115)** due to debt burdens and political instability.
- ◆ Despite these issues, **both countries exhibit strong judicial oversight**, acting as a check on the government.
- ◆ **Bangladesh (149)**, while making progress economically, faces hurdles in disseminating information due to a crackdown on the press.

### Insights from the Asia Pacific Region:

- ◆ The report draws attention to **China's (76) aggressive** anti-corruption measures, punishing millions of officials over the last decade.
- ◆ However, **concerns arise over the reliance on punishment** rather than institutional checks.
- ◆ **Across the Asia Pacific region**, the report reveals a stagnant average Corruption Perceptions Index score of 45 for five consecutive years, indicating a lack of meaningful progress in curbing corruption.

### Global Rankings and Weak Scores:

- ◆ **Seventy-one percent of countries in Asia and the Pacific** fall below the regional and global average scores, reflecting shortcomings in delivering on anti-corruption agendas by elected officials.
- ◆ Countries like **New Zealand (3)**, **Singapore (5)**, **Australia (14)**, and others, maintaining strong

corruption control mechanisms, continue to lead the index.

- ◆ Conversely, **fragile states** with authoritarian regimes, including **North Korea (172)** and **Myanmar (162)**, find themselves at the bottom.

### NATIONAL MISSION FOR MENTORING

**Context:** The National Council of Teacher Education (NCTE) is awaiting approval from the Ministry of Education to launch the National Mission for Mentoring (NMM) on a national scale. This mission aims to significantly expand the pool of mentor teachers from 60 to 1,000, providing professional and personal support to school teachers across India.

### Background:

- ◆ In line with the **National Education Policy (NEP) 2020**, the **NMM** seeks to establish a robust framework for continuous professional development and mentorship for school teachers.
- ◆ The proposal involves **scaling up the number of mentor teachers**, with a particular focus on various instructional modules and areas crucial to educators' development.

### Pilot Mode:

- ◆ The NCTE has already initiated a **pilot mode**, attracting around **700 mentee teachers** seeking training through the NMM portal.
- ◆ The mentoring areas identified **include instructional modules** for Hindi and Mathematics in primary, middle, and secondary sections, digital education, socio-emotional learning, inclusive education, professionalism and ethics, classroom management, building 21st-century skills, interpersonal skills, action research projects, art-integrated pedagogy, and teacher's mental health engagement.

### Mentor Profile:

- ◆ Out of the initial 60 mentor teachers, **half of them are Padma awardees**.
- ◆ This **initiative aligns with the NEP 2020** and marks a **groundbreaking effort where teachers receive mentorship** support to enhance their knowledge and teaching abilities.

**Financial Support:**

- ◆ The Union Budget for 2021-22 recognized the significance of the NMM, leading to the **Ministry of Education's approval and the allocation of ₹1.28 crore** for building digital infrastructure.
- ◆ Subsequently, in **2022-23, an additional ₹2 crore was utilized to run the mission in pilot mode.**
- ◆ The NCTE has drafted a **National Mission for Mentoring - The Bluebook**, a document awaiting approval from the Ministry of Education for the nationwide rollout.

**Implementation:**

- ◆ The pilot program was launched in **July 2022 in 30 selected central schools, including 15 Kendriya Vidyalayas, 10 Jawahar Navodaya Vidyalayas, and five CBSE schools across the country.**
- ◆ Despite a budget allocation of ₹1.56 crore for 2023-24, there has been **partial utilization, with potential spillover to the next financial year.**

**Impact and Future Outlook:**

- ◆ The NMM is not only enhancing the **teaching abilities of mentee** teachers but also fostering a culture of continuous learning.
- ◆ The program ensures **that educators stay updated and relevant** in the dynamic educational landscape.
- ◆ Once approved by the **Ministry of Education, the mission is poised** to make a significant impact on the professional development of teachers nationwide.



### INDIA'S FIRST PRIVATE HELICOPTER ASSEMBLY LINE

**Context:** In a significant development coinciding with French President Emmanuel Macron's visit to India, Airbus Helicopters and the Tata Group have unveiled plans to collaboratively set up India's maiden private-sector helicopter assembly line.

- ◆ **Aims:** The venture, marked by the establishment of a **Final Assembly Line (FAL)**, aims to manufacture Airbus' highly sought-after **H125 single-engine civil helicopter, catering to both the Indian market and neighboring countries.**

**Recent Aircraft production deals by TATA:**

- ◆ This groundbreaking initiative follows the footsteps of the Airbus-Tata collaboration to construct a Final

Assembly Line in **Vadodara for the C-295 military transport aircraft**, part of a substantial contract to supply 56 aircraft to the Indian Air Force.

**Partnership Dynamics:**

- ◆ Under this **strategic partnership**, Tata Advanced Systems Limited (TASL), a Tata Group subsidiary, will be at the forefront of establishing the helicopter assembly facility in collaboration with Airbus Helicopters.
- ◆ The venture is poised to fortify the aerospace ties between India and France, providing an **impetus to indigenous helicopter production capabilities.**
- ◆ Final Assembly Line in India will oversee the **comprehensive integration of major component assemblies, avionics, and mission systems.**
- ◆ Additionally, it will be responsible for intricate tasks such as the installation of **electrical harnesses, hydraulic circuits, flight controls, dynamic components, fuel systems, and the engine.**
- ◆ The facility will also conduct rigorous testing, qualification, and ultimately, deliver the **'Made in India' H125 helicopters to customers in India and the surrounding region.**

**Timeline and Deliveries:**

- ◆ The FAL is slated to commence deliveries of the **first H125 helicopters by 2026.**
- ◆ Location is yet to be finalized.

**Significance of the H125 Helicopter:**

- ◆ The H125, recognized as the **world's best-selling single-engine helicopter**, belongs to Airbus' Ecureuil family, boasting over 38 million flight hours globally.
- ◆ Its versatility is highlighted by its ability to operate in challenging conditions, **including high-and-hot environments.**
- ◆ The helicopter's adaptability makes it suitable for **a range of missions, from aerial work and firefighting to law enforcement, rescue operations, air ambulance services, and passenger transport.**

**Economic Impact:**

- ◆ Airbus, currently sourcing \$750 million annually from India for its global supply chain, envisions this **figure to surge to \$1.5 billion per year by 2026.**
- ◆ The venture not only signifies a boost to India's aerospace sector but also holds **promising economic implications, fostering growth and collaboration in the dynamic aviation industry.**

## VCM IN AGRICULTURE SECTOR AND ACCREDITATION PROTOCOL OF AGROFORESTRY NURSERIES

**Context:** Framework for Voluntary Carbon Market in Agriculture Sector and Accreditation Protocol of Agroforestry Nurseries has been launched.

### Key Highlights –

- ◆ **Framework for Voluntary Carbon Market (VCM):**
  - ▶ Ministry of Agriculture and Farmers' Welfare devised a framework for VCM in the agricultural sector.
  - ▶ Objective is to encourage small and medium farmers to benefit from carbon credits.

### What is Voluntary Carbon Market (VCM)?

- The VCM gives companies, **non-profit organizations, governments, and individuals** the opportunity to **buy and sell carbon offset credits**.
- A carbon offset is an instrument that represents the reduction of one metric tonne of carbon dioxide or GHG emissions.
- Companies that are unable to reach their **greenhouse gas (GHG) emission targets** can purchase carbon offset credits by investing in environmental projects that can avoid, reduce, or remove carbon emissions.

### ◆ Benefits of Introducing Farmers to Carbon Market:

- ▶ Fosters adoption of environmentally friendly agricultural practices.
- ▶ Accelerates sustainable agricultural methods.



### ◆ Significance of Agriculture Sector:

- ▶ Agriculture contributes significantly to the economy and livelihoods, engaging 54.6% of the workforce.
- ▶ GDP contribution: 18.6%.

### ◆ Introduction of the Accreditation Protocol for Agroforestry Nurseries.

- ▶ Strengthening Agroforestry: Accreditation Protocol aims to strengthen institutional arrangements for large-scale production and certification of planting material.
- ▶ Will promote agroforestry in the country.

### What are Carbon Credits?

- Carbon credits were devised as a mechanism to reduce greenhouse gas emissions by creating a market in which companies can trade in emissions permits.
- Under the system, companies get a set number of carbon credits, which decline over time.
- They can sell any excess to another company.

### India's Carbon Market:

- India has 1,451 projects registered or under various stages of consideration at the world's two leading carbon registries.
- Carbon credits issued to Indian entities are worth 11% of India's annual greenhouse gas emissions in 2021.
- Indian entities have already earned about 652 million dollars from carbon credits used to offset emissions.

## SURVEY TO ASSESS WOMEN PARTICIPATION IN WORKFORCE

**Context:** The Union Ministries of Labour & Employment and Women & Child Development have started a joint survey on increasing women participation in the workforce.

### About The Survey-

- ◆ The survey is being taken to assess the **spread of women employee-friendly practices** in the country.
- ◆ Various **international agencies and trade unions**, including the International Labour Organization, had expressed concern over the **decrease in participation of female workforce** in the country.

### Recent Data –

#### PLFS Data (2022-23):

- ◆ The latest **Periodic Labour Force Survey (PLFS) results**, released in October 2023, indicate a **significant increase in women's participation in the labor force**.

- ◆ The participation rate has risen from **23.3% in 2017-18 to 37% in 2022-23**.
- ◆ The survey includes **questions on various policies**, such as the formation of internal complaints committees for preventing sexual harassment, provision of creche facilities, ensuring equal pay for equal work, offering flexible or remote working hours, and providing transportation facilities during late hours.

### About Periodic Labour Force Survey:

- The Periodic Labour Force Survey (PLFS) is a comprehensive and recurring survey conducted by the Government of India through the **Ministry of Statistics and Programme Implementation (MoSPI)**.
- The primary objective of the PLFS is to collect data related to labor force participation, employment, and unemployment in the country.
- The survey aims to provide up-to-date and detailed information about the labor market in India, which is crucial for policymakers, researchers, and other stakeholders.
- PLFS collects data in two ways — **Usual Status (US)** and **Current Weekly Status (CWS)**.
- Within usual status, the survey respondent has to recall their employment details from the last one year while in the CWS; the respondent has to recall the details over the past one week.
- **Usual Status of Employment:** The estimate of the labour force in the usual status includes;
  - ▶ The persons who either worked or were seeking/available for work for a relatively long part of the **365 days preceding** the date of survey and also;
  - ▶ those persons from among the remaining population who had worked at least for **30 days** during the **reference period of 365 days** preceding the date of survey.
- The estimate of the labour force according to the **current weekly status** approach is derived by considering those who worked for **at least 1 hour** or was seeking/ available for **work for at least 1 hour on any day during the 7 days preceding the date of survey**.

## OUTBREAK OF WESTERN EQUINE ENCEPHALITIS VIRUS IN ARGENTINA

32

**Context:** The Western Equine Encephalitis Virus outbreak was detected in horses in Argentina and Uruguay.

## I. Outbreak of Virus

### A. Background

- ◆ **Western Equine Encephalitis Virus (WEEV):** Argentina's International Health Regulations National Focal Point reported a human case of **Western Equine Encephalitis Virus (WEEV)** infection to PAHO/WHO.

### B. Outbreak Overview

- ◆ **Cross-species transmission:** Concurrent **outbreaks in horses** in Argentina and Uruguay highlight the severity and potential for **cross-species transmission**.

## II. Historical Perspective

- ◆ **Past Human Cases:** Last reported human infections in Argentina were in 1982, 1983, and an isolated event in 1996. The current outbreak underscores the re-emergence of Western Equine Encephalitis after a prolonged hiatus.
- ◆ **Regional Context:** Previous outbreaks and human cases documented in the U.S. and Canada, with over 3,000 reported cases over the years.
- ◆ **Virus Threats:** The virus, a **recombinant of Eastern Equine Encephalitis Virus (EEEV)** and a Sindbis-like virus, poses a significant threat.

## III. Virology and Transmission

### A. Western Equine Encephalitis Virus (WEEV)

- ◆ WEEV belongs to the **Togaviridae** family, with an **11.5-kilobase single-stranded** RNA genome.
- ◆ **Passerine birds serve as reservoirs**, while **equine species act as intermediate hosts**.
- ◆ **Mosquitoes, as vectors**, transmit the virus to humans, emphasizing the importance of vector control.

## IV. Control and Prevention Strategies

- ◆ **PAHO/WHO Alert:** PAHO/WHO has issued an alert on the risk of WEE spread in the Americas.
- ◆ **One Health Approach:** Emphasizes collaboration between human, animal, and environmental health sectors. Crucial for effective control and prevention of the virus.
- ◆ **Interventions:** Environmental modifications, vector control, and equine vaccination recommended in affected and high-risk regions. Enhanced surveillance and detection crucial for preventing further spread.

## V. Way Forward

- ◆ **Public health threat:** The Western Equine Encephalitis outbreak in Argentina and Uruguay poses a significant **public health threat**.

- ◆ **One Health approach:** Immediate and coordinated efforts are essential to curb the spread, with a focus on the **One Health approach** and targeted interventions.



### NEW RAMSAR SITES

**Context:** India increases its tally of Ramsar sites (Wetlands of International Importance) to 80 by adding Five more wetlands to the list on the eve of World Wetlands Day 2024 (2nd February)

#### About:

- ◆ Three of these sites, **Ankasamudra Bird Conservation Reserve, Aghanashini Estuary and Magadi Kere Conservation Reserve** are located in **Karnataka** whereas two, **Karaivetti Bird Sanctuary and Longwood Shola Reserve Forest** are in **Tamilnadu**.
- ◆ With the addition of these five wetlands to List of Wetlands of International Importance, the total **area covered under Ramsar sites is now 1.33 million ha which is an increase of 5,523.87 ha from existing area (of 1.327 million ha).**
- ◆ **Tamil Nadu continues to have maximum number of Ramsar Sites (16 sites) followed by Uttar Pradesh (10 sites).**

#### Ramsar Convention:

- ◆ India is one of the Contracting Parties **to Ramsar Convention**, signed in Ramsar, Iran, in 1971.
- ◆ **World Wetlands Day (WWD)** is celebrated across the globe to commemorate the adoption of this international agreement on wetlands on 2nd February 1971.
- ◆ **India ratified this Convention on 1st February 1982.**
- ◆ Earlier in August 2022, India achieved a significant milestone of taking the total number of Ramsar Sites **to 75 during the 75th Year of Independence.**
- ◆ Due to a significant policy push from the Government of India, **the number of Ramsar sites has increased from 26 to 80 in the last ten years, of which 38 have been added in the last three years alone.**
- ◆ The **theme of WWD-2024 is 'Wetlands and Human Wellbeing'** which underscores the critical role wetlands play in enhancing our lives.
- ◆ It highlights how wetlands contribute to flood protection, clean water, biodiversity and recreational opportunities, all of which are essential for human health and prosperity.
- ◆ This year, **the Ministry of Environment, Forest & Climate Change (MoEF&CC), Government of India in collaboration with the Government of Madhya Pradesh,** is organizing the national World Wetlands Day event at Sirpur Lake, Indore, a Ramsar site designated in 2022.

### LIST OF NEWLY DESIGNATED RAMSAR SITES

Sl. No.	Name of Ramsar Site	State	Total area in ha
1	Ankasamudra Bird Conservation Reserve	Karnataka	98.76
2	Aghanashini Estuary	Karnataka	4801
3	Magadi Kere Conservation Reserve	Karnataka	54.38
4	Karaivetti Bird sanctuary	Tamil Nadu	453.72
5	Longwood Shola Reserve Forest	Tamil Nadu	116.007
			5,523.867

- ◆ Ankasamudra Bird Conservation Reserve is a humanmade Village Irrigation Tank built centuries back and is spread over an area of 98.76ha (244.04 acre) adjoining the Ankasamudra village. It is an ecologically important wetland, rich in biodiversity, comprising over 210 species of plants, 8 species of mammals, 25 species of reptiles, 240 species of birds,

41 species of fishes, 3 species of frogs, 27 species of butterflies and 32 species of odonates. Over 30'000 waterbirds nest and roost at this wetland, which also supports more than 1% of the biogeographic population of Painted Stork (*Mycteria leucocephala*) and Black-headed Ibis (*Threskiornis melanocephalus*).



**FIG:** A view of Ankasamudra Bird CR Checkered keelback at Ankasamudra

- ◆ **Aghanashini Estuary**, spread over an area of 4801 ha, is formed at the confluence of Aghanashini River with the Arabian sea. The brackish water of the Estuary provides diverse ecosystem services including flood and erosion risk mitigation, biodiversity conservation and livelihood support. The wetland also provides livelihoods to 6000-7500 families by supporting fishing, agriculture, collection of edible bivalves and crabs, shrimp aquaculture, traditional fish farming in the estuarine rice fields (locally known as Gazni rice fields), bivalve shell collection and salt production. Additionally, the mangroves bordering the estuary help to protect the shores against storms and cyclones. The estuary regularly supports over 43,000 counts of over 66 waterbird species and over 1% of the biogeographic population of 15 waterbird species (which includes river tern, oriental darter, lesser black-backed gull, woolly-necked stork, Eurasian oystercatcher and others).



**FIG:** Sanikatta salt pans of Aghanashini



**FIG:** Aghanashini estuary with mangroves blending

- ◆ **Magadi Kere Conservation Reserve**, is a human-made wetland with an area of nearly 50 hectares which was constructed to store rainwater for irrigation purposes. It is home to over 166 species of birds, of which 130 are migratory. The wetland harbours two vulnerable species, namely Common pochard (*Aythya ferina*) and River tern (*Sterna aurantia*) and four near-threatened species, namely Oriental Darter (*Anhinga melanogaster*), Black-headed Ibis (*Threskiornis melanocephalus*), Woolly-necked Stork (*Ciconia episcopus*) and Painted Stork (*Mycteria leucocephala*). Nearly 8,000 birds visit the site during winter. Magadi Kere is also one of the largest wintering grounds for the Bar-headed goose (*Anser indicus*) in Southern India. The wetland is a designated Important Bird Area (IBA) and also listed as a priority area for conservation in India.



**FIG:** Panoramic view of Magadi Kere



**FIG:** Bar headed goose in Magadi Kere

- ◆ **Karaivetti Bird Sanctuary** spanning 453.72 ha is one of the largest inland wetlands of Tamil Nadu, and is a significant source of groundwater recharge for the area. Water from the wetland is utilized by the villagers for cultivating agricultural crops such as paddy, sugar cane, cotton, corn, and split red gram. Karaivetti has one of the largest congregations of waterbirds in the State of Tamil Nadu. About 198 species of birds have been recorded here; some of the important visitors being the Bar headed Goose, Pintailed duck, Garganey, Northern Shoveler, Common Pochard, Eurasian Wigeon, Common teal and Cotton teal.



**FIG:** Karaivetti Wetland

A pair of Black Winged Stilt mating

- ◆ **The Longwood Shola Reserve Forest** derives its name from the Tamil word, "Solai", which means a 'tropical rain forest'. The 'Sholas' are found in the upper reaches of the Nilgiris, Anamalais, Palni hills, Kalakadu, Mundanthurai and Kanyakumari in Tamil Nadu. These forested wetlands serve as habitats for the globally endangered Black-chinned Nilgiri Laughing thrush (*Strophocincla cachinnans*), Nilgiri Blue Robin (*Myiomela major*), and vulnerable Nilgiri Wood-pigeon (*Columba elphinstonii*). As many as 14 out of 26 endemic birds species of the Western Ghats are found in these wetlands.



**FIG:** Images of the forested wetlands of the Longwood Shola Forest



**IAS  
2024**

**GS SCORE**

An Institute for Civil Services

# **FOCUS** **CSE 2024**

**SELF-PACED TEST SERIES** *for* **PRELIMS & MAINS**

**Attempt the tests according to your  
PREPARATION & PRIORITY**

⊕ **Comprehensive coverage of Prelims & Mains Syllabus through 4000+ MCQs & 400+ Mains Questions + Mentorship**

**A total of 45 Prelims Tests including**

- ⊕ 14 Fundamental Tests
- ⊕ 4 Current Affairs Tests
- ⊕ 6 CSAT Tests
- ⊕ 6 Subject Revision Tests
- ⊕ 16 Mock Tests (GS + CSAT)

**A total of 20 Mains Tests including**

- ⊕ 9 Sectional Tests
- ⊕ 3 Essay Mock Tests
- ⊕ 8 Mock Tests (After Prelims)

⊕ **Approach Class before the start of each subject to provide comprehensive understanding of the subject.**

⊕ **Concept and Essential Skills Building through Tests, Discussion and Mentorship**

⊕ **Strong emphasis on both Static & Current Events as per the evolving format**

**PROGRAMME FEE**

**FOCUS**  
₹ 14,000 (+GST)

**FOCUS + TARGET PT**  
₹ 20,000 (+GST)

☎ **8448496262**

**www.iasscore.in**

Scan QR Code  
for more information



## ***Section D* [QUIK BYTES]**

- ☞ Jeevan Raksha Padak Series of Awards-2023
- ☞ 'Rajmargyatra' app
- ☞ SAMALEI Plan
- ☞ Maratha Military Landscapes
- ☞ Ex. SADA TANSEEQ
- ☞ Birds of many feathers spotted in Ramnad's wetlands
- ☞ Bharat 5G Portal and Venture Capitalists/Investors meeting
- ☞ PFRDA TRACE
- ☞ Maritime Single Window and MMD Modules in Sagar Setu (NLP-Marine)

### **Species in News**

- ☞ Golden Tiger

### Jeevan Raksha Padak Series of Awards-2023



The President of India has approved the conferment of Jeevan Raksha Padak Series of Awards-2023 on 31 persons which includes Sarvottam Jeevan Raksha Padak to 03, Uttam Jeevan Raksha Padak to 07 and Jeevan Raksha Padak to 21 persons.

#### About:

- Jeevan Raksha Padak series of awards are given to a person for meritorious act of human nature in saving the life of a person.
- The award is given in three categories, namely, Sarvottam Jeevan Raksha Padak, Uttam Jeevan Raksha Padak and Jeevan Raksha Padak.
- Persons of all walks of life are eligible for these awards.
- The award can also be conferred posthumously.
- The decoration of the award (medal, certificate signed by the Union Home Minister and lump sum monetary allowance) is presented to the awardees in due course by the respective Union Ministries/Organizations/ State Government to which the awardee belongs.

### 'Rajmargyatra' app



'Rajmargyatra' mobile application launched by the National Highways Authority of India (NHAI). The app to show details of tourist sites near highways.

#### About:

- NHAI is updating its app following a suggestion from the Ministry of Tourism to increase tourist footfalls at sites located within 25 kilometre radius of the highways.
- The details of tourist sites in the vicinity of national highways and convenient routes to reach them will soon be available.
- The app offers essential information and complaint redressal.
- Tourism ministry, however, suggested mapping places that are in the radius of 200 km of highways.
- The app was introduced as a one-stop repository to improve user travelling experience in August 2023 by providing essential information such as real-time weather conditions, timely broadcast notifications, and access to details about nearby toll plazas, petrol pumps, hospitals, hotels, and other facilities for national highway users.
- The app is also equipped with an inbuilt complaint redressal and escalation mechanism. Users can easily report the issues, attaching geo-tagged videos or photos for better clarity.

## SAMALEI Plan



Odisha launches SAMALEI Plan to transform Samaleswari Temple into a spiritual hub.

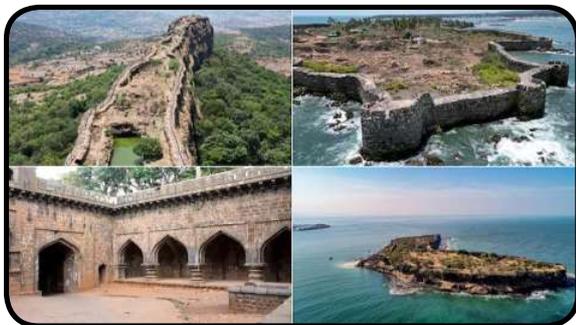
### About:

- Comprehensive redevelopment project to enhance the temple precinct of MaaSamaleswari in Sambalpur.
- The project aims to provide a unique experiential experience to the visitors and pilgrims by creating an ambience of spirituality, culture, and heritage.
- It will boost the tourism-based economy of Sambalpur and Odisha by facilitating economic opportunities for the locals.

### About Samaleswari Temple -

- Samaleswari Temple is a Hindu temple in Sambalpur, Odisha, India, dedicated to the goddess known as 'Samaleswari', also known among the natives as samaleimaa, meaning Mother Samaleswari.
- Shree ShreeSamaleswari, the presiding deity of Sambalpur, is a strong religious force in western part of Odisha and Chhattisgarh state of India.
- On the bank of the river Mahanadi, the mother goddess Samaleswari is worshipped from ancient times as Jagatjanani, Adishakti, Mahalaxmi and Mahasaraswati, and is the mother of the universe.
- After Lord Jagannath, she is the only Goddess in Odisha who is the presiding deity of such a large region including the complete Western Odisha, parts of Jharkhand and Chhattisgarh.
- The region in which the temple is situated has a rich cultural heritage.
- Sambalpur region is popularly known as Hirakhanda from ancient times.

## Maratha Military Landscapes



'Maratha Military Landscapes' to be India's nomination for UNESCO tag for 2024-25

### About 'Maratha Military Landscapes of India':

- The 'Maratha Military Landscapes of India' comprise **twelve components**, including **Salher Fort, Shivneri Fort, Lohgad, Khanderi Fort, Raigad, Rajgad, Pratapgad, Suvarnadurg, Panhala Fort, Vijay Durg, Sindhudurg, and Gingee Fort.**
- These structures, dating back to **the 17th and 19th centuries**, span across **Maharashtra and Tamil Nadu**, showcasing the strategic military prowess of the Maratha rule.
- The Maratha Military Landscapes include **hill forts, hill-forest forts, hill-plateau forts, coastal forts, and island forts.**
- This variety reflects the **Marathas' adaptability and ingenuity** in using the natural terrain to their advantage.

**Ex. SADA TANSEEQ**

India- Saudi Arabia joint military exercise 'SadaTanseeq' commences in Rajasthan

**About:**

- The **inaugural edition** of **India-Saudi Arabia Joint Military Exercise 'SADA TANSEEQ'** commenced in Rajasthan.
- The **Saudi Arabian contingent** comprising 45 personnel is being represented by **Royal Saudi Land Forces**.
- The Indian Army contingent also comprising **45 personnel** is being represented by a Battalion from the **Brigade of the Guards (Mechanised Infantry)**.
- **Aim of the Exercise** is to train troops of both sides for **Joint Operations in Semi Desert terrain under Chapter VII of the United Nations Charter**.
- The Exercise will enable both the sides to **share their best practices in the tactics**, techniques and procedures of conducting operations in sub-conventional domain.
- It will facilitate developing **interoperability, bonhomie and camaraderie** between troops from both the sides.
- The Exercise will involve **Establishment of Mobile Vehicle Check Post, Cordon & Search Operation, House Intervention Drill, Reflex Shooting, Slithering and Sniper Firing**.

**Birds of many feathers spotted in Ramnad's wetlands**

In a remarkable occurrence, Oystercatcher birds, unseen along the coasts of Ramanathapuram for nearly 35 years, have made a stunning reappearance. The discovery follows a recent wetland bird census conducted across a broader range than in previous years.

**Oystercatcher birds**

- The oystercatchers are a group of waders forming the family Haematopodidae, which has a single genus, Haematopus. They are found on coasts worldwide apart from the polar regions and some tropical regions of Africa and South East Asia.
- The diet of oystercatchers varies with location. Species occurring inland feed upon earthworms and insect larvae.
- Nearly all species of oystercatcher are monogamous, although there are reports of polygamy in the Eurasian oystercatcher.
- The Chatham oystercatcher is endemic to the Chatham Islands of New Zealand and is listed as endangered by the IUCN, while both the African and Eurasian oystercatchers are considered near threatened.

### Migratory Season in Ramanathapuram

- Typically, the migratory season in Ramanathapuram spans from November to April, attracting various bird species to its water bodies and the Gulf of Mannar biosphere park, featuring an expansive mangrove area. This region serves as a crucial nesting ground for birds during their migration.
- **Wetland bird census 2022 - 23**
- No. of survey sites:13
- Species - 99
- Population - 8,676
- **Wetland bird census 2023 - 24**
- No. survey sites : 26
- Species - 138
- Population - 26,541

### Bharat 5G Portal and Venture Capitalists/Investors meeting



Launch of Bharat 5G Portal and Venture Capitalists/Investors meeting at Bharat Telecom 2024.

#### About Bharat 5G portal –

- The Bharat 5G portal- an **integrated portal is a comprehensive platform** serving the **interests of startups, industry and academia in quantum, 6G, IPR and 5G domains.**
- It also features the Future Tech-Experts registration portal in collaboration with PANIIT USA, aimed to help and advise the Indian Telecom ecosystem to advance the goal of Atmanirbhar Bharat.
- The **Bharat 5G Portal** acts as a **one-stop solution for all quantum, IPR, PoCs/Pilot, 5G and 6G-related works**, capturing academic R&D developments, industry standards, OEMs, startups/MSMEs, and subject matter experts.
- It aims to **propel India's 5G capabilities, foster innovation, collaboration, and knowledge-sharing** within the telecom sector.
- **100+ Labs/institutions** will be connected through a dedicated portal (Digital network of 100 5G Labs).
- It acts as a **knowledge dissemination platform** for the institutions/students/start-ups wherein 5G use cases are being tested/developed.
- **Telecommunications Consultants India Limited(TCIL)** is **implementation agency** for installation of 100 Labs and portal development.

### PFRDA TRACE

PFRDA invites bids for selection of System Integrator (SI) for design, development, implementation and maintenance of PFRDA-TRACE (Tracking Reporting Analytics & Compliance E-Platform)

**About:**

- It is a part of Technology Architecture (TARCH) project.
- PFRDA-TRACE will serve as a comprehensive tool for submitting regulatory and supervisory compliance reports by intermediaries, sharing reports and data with PFRDA, monitoring functions, facilitating a workflow for PFRDA departments to review and track submissions, enabling communication of observations and remarks, and incorporating a validation process for reports and data submitted by intermediaries.
- The PFRDA-TRACE is the second phase of the TARCH project, and PFRDA is selecting a System Integrator (SI) vendor specifically for this module.
- The System Integrator will be responsible for studying the existing processes, proposing improved workflows, and providing design, development, customisation, implementation, and maintenance services for PFRDA-TRACE.
- The successful bidder will play a crucial & pivotal role in PFRDA's digital transformation journey.

**Maritime Single Window and MMD Modules in Sagar Setu (NLP-Marine)**

Transforming India's Maritime Operations through Digitization

**About:**

- NLP Marine is a one-stop platform aimed at connecting all the stakeholders of the logistics community using IT.
- Soon two cutting-edge digital modules, the Maritime Single Window (MSW) and the Mercantile Maritime Department (MMD), on the Sagar Setu (NLP-M) platform.
- Maritime Single Window (MSW) module in Sagar Setu (NLP-M), is a digital platform or system that enables the electronic submission, processing, and exchange of maritime-related information and documents between government authorities, port operators, and stakeholders involved in international maritime trade.
- This module was successfully tested with the official of Directorate General of Shipping along with Shipping Agents, Trade Associations and Port Official of all Major Ports.
- Mercantile Maritime Department (MMD) module in Sagar Setu (NLP-M), which is digital platform that provides vessel detention and vessel release status information.
- MMD module will help Mercantile Maritime Department in sharing the vessel surveys information in Sagar Setu platform.
- These modules are part of the broader digital initiatives undertaken by the Ministry of Ports, Shipping, and Waterways to propel the maritime sector into the future.

## SPECIES IN NEWS

## Golden Tiger



A rare "Golden tiger" was recently clicked by a wildlife photographer in the Kaziranga National Park.

**About:**

- It has a rare "golden coat".
- Odisha is a state to establish a melanistic tiger safari – a first of its kind in the world
- More than one tiger with the golden coat are believed to be in Kaziranga but the exact estimate is not known.
- Last time it was sighted in 2019.
- Earlier a black or pseudo-melanistic tigers was sighted in the Simlipal Tiger Reserve in Odisha.
- "This tiger looks golden because it has a mutation or a genetic variant, due to which the black colour is missing.
- Basically tigers have three colours – black, orange and white. In the case of this tiger, the black colour is missing and it is slightly faded. Even the orange is faded.





**SUCCESS IS A PRACTICE WE DO!**

