

CURRENT AFFAIRS

WEEKLY

WEEK: 3
DECEMBER
2023

MAINS

GS- I

- ▣ THE RED SEA & COMPLEXITIES OF GLOBAL EVENTS

GS- II

- ▣ WHY ONLY FIVE COUNTRIES HAVE VETO POWER IN THE UN SECURITY COUNCIL
- ▣ INDIA, OMAN IN TALKS FOR COMPREHENSIVE ECONOMIC PARTNERSHIP AGREEMENT
- ▣ BANNING PARTY NAME ON RELIGIOUS
- ▣ TELECOMMUNICATIONS BILL, 2023 PASSED IN LOK SABHA
- ▣ THE INTERSECTION OF EDUCATION, DIGITAL LITERACY, AND INDIA'S WORKFORCE DEVELOPMENT

GS- III

- ▣ HOW DOES GOVERNMENT POLICY IMPACT MICROECONOMICS?
- ▣ INTERNATIONAL ENERGY AGENCY'S COAL 2023 REPORT
- ▣ HOW TERMS OF TRADE HAVE MOVED FOR AGRICULTURE
- ▣ INDIA'S SURPRISINGLY FAST GDP GROWTH AND THE ONGOING SURGE IN SENSEX
- ▣ ARCTIC REPORT CARD 2023
- ▣ COP AND FOSSIL FUEL ELIMINATION STRATEGY
- ▣ NITI AAYOG REPORT ON 'A GREEN AND SUSTAINABLE GROWTH AGENDA FOR THE GLOBAL ECONOMY'
- ▣ MRNA, THE NEXT FRONTIER FOR PERSONALIZED MEDICINE

PRELIMS

ART & CULTURE

- ▣ Kerala's Alangad jaggery

INTERNATIONAL RELATIONS

- ▣ European Union's Artificial Intelligence Act

POLITY AND GOVERNANCE

- ▣ 78 MPs Suspended
- ▣ Exclusion of Blood Disorders from Job Reservations
- ▣ Supreme Court Rulings on Enforcement Directorate's Arrest Powers
- ▣ Three sub-schemes under the RAMP programme launched

ECONOMY

- ▣ World Bank's move on Multilateral Development Banks (MDBs)

ENVIRONMENT

- ▣ Climate Change Performance Index 2024
- ▣ Centre allows use of sugarcane juice, B-molasses to make ethanol

SCIENCE AND TECHNOLOGY

- ▣ 'Noma': The latest addition to WHO's list of neglected tropical diseases
- ▣ COVID sub-variant JN.1

NEWS IN SHORT

- ▣ Solar-electric boat Barracuda launched
- ▣ Mahalakshmi Scheme
- ▣ Tax Inspectors without Borders (TIWB)
- ▣ Gelephu Smartcity Project
- ▣ Disinflation
- ▣ Indira Gandhi Prize for Peace
- ▣ Srivaikuntam
- ▣ Red Sea
- ▣ Wisent (European Wild Bison)
- ▣ Black Pelicans (Pelecanus niger)

SPECIALS

- ▣ India-Maldives Relations

GS SCORE

An Institute for Civil Services

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 - 3 (DECEMBER, 2023)

Section - A: MAINS CURRENT AFFAIRS			
	Area of GS	Topics in News	Page No.
GS I	GEOGRAPHY	<ul style="list-style-type: none"> The Red Sea & complexities of global events 	02
GS II	INTERNATIONAL RELATIONS	<ul style="list-style-type: none"> Why only five countries have veto power in the UN Security Council 	02
		<ul style="list-style-type: none"> India, Oman in talks for comprehensive economic partnership agreement 	03
	POLITY & GOVERNANCE	<ul style="list-style-type: none"> Banning Party Name on Religious 	05
		<ul style="list-style-type: none"> Telecommunications Bill, 2023 passed in Lok Sabha 	06
		<ul style="list-style-type: none"> The Intersection of Education, Digital Literacy, and India's Workforce Development 	07
GS III	ECONOMY	<ul style="list-style-type: none"> How Does Government Policy Impact Microeconomics? 	08
		<ul style="list-style-type: none"> International Energy Agency's Coal 2023 Report 	9
		<ul style="list-style-type: none"> How terms of trade have moved for agriculture 	10
		<ul style="list-style-type: none"> India's surprisingly fast GDP growth and the ongoing surge in Sensex 	11
	ENVIRONMENT	<ul style="list-style-type: none"> Arctic Report Card 2023 	13
		<ul style="list-style-type: none"> CoP and Fossil Fuel Elimination Strategy 	14
		<ul style="list-style-type: none"> NITI Aayog report on 'A Green and Sustainable Growth Agenda for the Global Economy' 	15
	SCIENCE AND TECHNOLOGY	<ul style="list-style-type: none"> mRNA, the Next Frontier for Personalized Medicine 	16
Section - B: SPECIAL			
	Area of GS	Topics in News	Page No.
GS II	INTERNATIONAL RELATIONS	<ul style="list-style-type: none"> India-Maldives Relations 	20
Section - C: PRELIMS CURRENT AFFAIRS			
	Area of GS	Topics in News	Page No.
GS I	ART AND CULTURE	<ul style="list-style-type: none"> Kerala's Alangad jaggery 	24

GS SCORE

An Institute for Civil Services

At **GS SCORE**, we embody quality education through latest pedagogy, personalized attention for an empowered learning experience.

EXCELLENCE & EMPOWERMENT
are our **guiding principles**.

COURSES *for* IAS 2025-26



GS FOUNDATION



OPTIONAL FOUNDATION

- POL. SCIENCE
- ANTHROPOLOGY
- SOCIOLOGY
- LAW
- HISTORY
- GEOGRAPHY
- PUB. AD.



MAINS CLASSES



TEST SERIES

- PRELIMS TEST SERIES
- MAINS TEST SERIES
- INTEGRATED TEST SERIES
- OPTIONAL TEST SERIES



I am highly obliged towards GS SCORE for its best evaluation and assessment mechanism which helped me to crack UPSC in first attempt.

YASHARTH SHEKHAR (AIR 12, 2021)



I am very thankful to GS Score for realizing my dreams into reality. The well-crafted all India Test Series helped me a lot and augmented my score significantly.

APALA MISHRA (AIR-9, 2020)

THE MOST **EXPERIENCED & SEASONED** SUBJECT EXPERTS



IASSCOREofficial



gsscoreofficial



gsscoreofficial



gsscoreofficial



iasscore



gsscoreofficial/



For Information, Contact **8448496262** | Website: **<https://iasscore.in/>**

GS II	INTERNATIONAL RELATIONS	• European Union’s Artificial Intelligence Act	24
	POLITY AND GOVERNANCE	• 78 MPs Suspended	25
		• Exclusion of Blood Disorders from Job Reservations	26
		• Supreme Court Rulings on Enforcement Directorate’s Arrest Powers	26
		• Three sub-schemes under the RAMP programme launched	27
GS III	ECONOMY	• World Bank’s move on Multilateral Development Banks (MDBs)	27
	ENVIRONMENT	• Climate Change Performance Index 2024	28
		• Centre allows use of sugarcane juice, B-molasses to make ethanol	29
	SCIENCE AND TECHNOLOGY	• ‘Noma’: The latest addition to WHO’s list of neglected tropical diseases	30
		• COVID sub-variant JN.1	31
Section - D: SHORT NEWS			
Area of GS		Topics in News	Page No.
POLITY AND GOVERNANCE		• Solar-electric boat Barracuda launched	34
		• Mahalakshmi Scheme	34
SECURITY		• Tax Inspectors without Borders (TIWB)	34
ECONOMY		• Gelephu Smartcity Project	35
		• Disinflation	35
MISCELLANEOUS		• Indira Gandhi Prize for Peace	36
LOCATION IN NEWS			
• Srivaikuntam			36
• Red Sea			37
SPECIES IN NEWS			
• Wisent (European Wild Bison)			37
• Black Pelicans (Pelecanus niger)			38



- 01 **100+ Mentorship Sessions** (Pre & Post Test) based on **52 Tests** to cover entire Syllabus of GS Mains.
- 02 **80+ Prelims Tests** integrated with the **Mentorship Schedule of Mains Answer Writing Tests**.
- 03 **Detailed Discussion of the Tests.**
- 04 **Daily Preparation Target** with Strict Schedule (No Flexi Format).
- 05 **16 Weekly Revision Tests & 12 Subject Revision Tests** for Both Prelims & Mains
- 06 **Prelims Mock Test Series** (20 Tests) for **All India Ranking & Performance Analysis.**
- 07 **One on One Mentorship Session** for Marks Improvement.



Section A [MAINS]

- ☞ The Red Sea & complexities of global events
- ☞ Why only five countries have veto power in the UN Security Council
- ☞ India, Oman in talks for comprehensive economic partnership agreement
- ☞ Banning Party Name on Religious
- ☞ Telecommunications Bill, 2023 passed in Lok Sabha
- ☞ The Intersection of Education, Digital Literacy, and India's Workforce Development
- ☞ How Does Government Policy Impact Microeconomics?
- ☞ International Energy Agency's Coal 2023 Report
- ☞ How terms of trade have moved for agriculture
- ☞ India's surprisingly fast GDP growth and the ongoing surge in Sensex
- ☞ Arctic Report Card 2023
- ☞ CoP and Fossil Fuel Elimination Strategy
- ☞ NITI Aayog report on 'A Green and Sustainable Growth Agenda for the Global Economy'
- ☞ mRNA, the Next Frontier for Personalized Medicine



THE RED SEA & COMPLEXITIES OF GLOBAL EVENTS

Context: The Israel-Hamas war has opened a new front in the Red Sea, which will impact Asian economies.

Global Tensions

- ◆ **Escalation of Tensions:** At the end of October, a bold terror attack by Hamas against Israel **disrupted regional stability**, drawing the **Yemen-based Houthi militia** into the conflict.



- ◆ **Red Sea's Strategic Significance:** The announcement of **Houthi involvement brought the critical Red Sea into the heart of the conflict**, posing a threat to the Suez Canal, a vital artery for nearly 15% of global trade.
- ◆ **Houthi Aggression at Sea:** In mid-November, the **Houthis raided a cargo vessel with reported Israeli links in the Red Sea**, showcasing their military capabilities and escalating tensions.

Global Response

- ◆ **U.S. Military Deployment:** The United States has taken a leading role, **deploying military assets to counter Houthi threats**, including drones, missiles, and direct operations.
- ◆ **Multinational Task Force:** In response to increasing incidents, **the U.S. calls for a multinational task force in the Bab al-Mandab Strait**, a crucial passage connecting Yemen, Djibouti, and Eritrea.
- ◆ **Saudi Arabia's Dilemma:** Despite the on-going conflict with the Houthis in Yemen, **Saudi Arabia urges restraint by the U.S.**, signalling a complex geopolitical landscape.
- ◆ **Saudi-Iran Détente:** Surprisingly, talks between **Saudi Arabia and the Houthi leadership** have emerged following a **Saudi-Iran detente brokered by China**.
- ◆ **China's Diplomatic Role:** Arab response to the **Gaza**

crisis indicates positive sentiments toward China, particularly due to its balanced stance compared to the **unequivocal support given by the U.S. to Israel**.

Global Impact on Asian Economies

- ◆ **Security Depletion in the Red Sea:** The global ramifications of security deterioration in the **Red Sea extend** to Asian economies such as India, Japan, South Korea, and China.
- ◆ **Persian Gulf Dynamics:** India, Japan, and South Korea **navigate diplomatic channels in dealing with tensions in the Persian Gulf**, each having specific interests and concerns.

Mobilizing Global Partners

- ◆ **U.S. Call for Action:** Reflecting on past **multilateral efforts against piracy**, the **U.S. calls for partners to mobilize**, recognizing the necessity of a collective response.
- ◆ **Stakeholders in West Asian Security:** India, Japan, and South Korea, **as net importers of oil and gas**, emerge as stakeholders in West Asian security, underlining their strategic and kinetic interests.
- ◆ **Non-State Actors' Growing Influence**
- ◆ **Shifting Geopolitical Order:** As the **global geopolitical landscape evolves**, the rise of non-state militant actors becomes a crucial factor, often **aligned with state interests for short-term gains and long-term strategic victories**.

Way Forward: Red Sea's Security Challenges

- ◆ In an interconnected world facing challenges to the **western-led international security order**, a more **progressive and practical approach** to power development and deployment is essential to address security challenges beyond self-defined areas of interest.



WHY ONLY FIVE COUNTRIES HAVE VETO POWER IN THE UN SECURITY COUNCIL

Context: The continued US support for Israel has been noted at the UN. It vetoed a resolution of the UN Security Council that called for a ceasefire.

Background:

- ◆ On December 12, the **United Nations General Assembly (UNGA)** adopted a resolution calling

for an immediate ceasefire in the Israel-Hamas conflict in Gaza. This non-binding resolution reflects the consensus among member nations.

- ♦ **Voting Dynamics:** With **153 nations in favour, 10 against, and 23 abstentions**, the focus shifts to the small number of countries opposing the resolution. The United States' consistent support for Israel, evident in previous UN votes, raises questions about voting patterns.



Explaining Veto Power in the UN Security Council (UNSC):

- ♦ **Definition:** The UNSC, **comprising the P5 countries**, holds significant power. Each P5 member has the **exclusive right to veto UNSC resolutions**, making them **legally binding or ineffective**.
- ♦ **Historical Background:** The origins of veto power trace back to the **aftermath of World War II**, where the **victorious P5 nations** were instrumental in **forming the UN**. The veto power was granted to acknowledge their key roles in establishing the organization and maintaining international peace and security.
- ♦ **P5's Role in Post-War Power Dynamics:** The **P5 was prominent victors against Axis powers** and **sought to maintain their influential positions** in global affairs.
- ♦ The veto power was seen as a means to ensure their **active participation in the UN**, particularly during the formation phase.

Challenges to the Veto System:

- ♦ Over the years, **countries like Chile, Costa Rica, Cuba, Italy, and Switzerland** voiced concerns about the exclusive veto power, claiming it could lead to **unjust projects by major powers against smaller nations**.
- ♦ Efforts to amend the veto system, allowing for a **more inclusive representation**, have faced challenges. Countries like India have advocated for

P5 membership, emphasizing the need for broader representation. However, these attempts have not resulted in significant changes.

Contemporary Perspectives:

- ♦ **Current Power Dynamics:** While the relative influence of the UK and France has diminished, China, the US, and Russia continues to wield significant power in the UNSC. Power rivalries and the fear of rivals gaining influence have contributed to the preservation of the veto system.
- ♦ **Proposed Alternatives:** Critics suggest reimagining the UNSC structure, making all 15 seats temporary with open competitions, term limits, and restrictions on lobbying expenses. Such changes aim to promote continuity and prevent domination by a few powerful nations.

Way Forward:

- ♦ The recent UNGA resolution and the on-going use of veto power in the UNSC highlight the complexities of international diplomacy.
- ♦ As the world evolves, discussions about reforming these structures persist, with differing opinions on how to achieve a more equitable and effective global governance system.



INDIA, OMAN IN TALKS FOR COMPREHENSIVE ECONOMIC PARTNERSHIP AGREEMENT

Context: Recently, Sultan Haitham bin Tarik, head of Oman, is on his first visit to India.

About:

- ♦ Talks at the Hyderabad House covered discussions on the Israel-Palestine situation, reflecting India's close monitoring of the Gaza conflict.
- ♦ **Agreements and Initiatives:**
 - Five documents were signed, including an anti-money laundering agreement between India's Financial Intelligence Unit and Oman's National Centre for Financial Information.
 - A proposal to recreate a maritime voyage from Mandvi, Gujarat, to Muscat in 2025-26 was embraced as a celebration of the historical ties between the two nations.

Key Highlights of the statement signed:

- ♦ The Prime Minister of India and Sultan Haitham bin

Tarik strongly condemned terrorism, emphasizing their **commitment to combat** it in all forms.

- ◆ The Joint Statement highlighted the importance of universal values like peace, moderation, coexistence, and tolerance.
- ◆ **Vision Document:** The leaders endorsed a vision document titled '**A Joint Partnership for the Future**,' focusing on sectors such as digital connectivity, medical tourism, maritime security, hospitality, agriculture, and food security.
- ◆ **Economic Collaboration:** Appreciation was expressed for the third tranche of the **Oman-India Joint Investment Fund**, seen as a catalyst for investments from **Oman and the Gulf region** into India's rapidly growing sectors.
- ◆ **Maritime Security Monitoring:** India is closely monitoring the maritime situation near Oman and Yemen, particularly due to heightened threats to commercial shipping vessels arising.

India-Oman Relations:

◆ Background:

- ▶ The two countries across the Arabian Sea are linked by geography, history and culture and enjoy warm and cordial relations, which are attributed to historical maritime trade linkages.
- ▶ The Sultanate of Oman is a strategic partner of India in the Gulf and an important interlocutor at the Gulf Cooperation Council (GCC), Arab League and Indian Ocean Rim Association (IORA) fora.
- ▶ Gandhi Peace Prize 2019 was conferred on Late HM Sultan Qaboos in recognition of his leadership in strengthening the ties between India & Oman and his efforts to promote peace in the Gulf region.

◆ Defense Relations:

- ▶ Joint Military Cooperation Committee (JMCC):
 - The JMCC is the highest forum of engagement between India and Oman in the field of defence.
 - The JMCC is expected to meet annually, but could not be organised since 2018 when the meeting of the 9th JMCC was held in Oman.

◆ Military Exercises:

- ▶ Army exercise: Al Najah

- ▶ Air Force exercise: Eastern Bridge

- ▶ Naval Exercise: Naseem Al Bahr

◆ Economic & Commercial Relations:

- ▶ Institutional mechanisms like Joint Commission Meeting (JCM) and Joint Business Council (JBC) oversee economic cooperation between India and Oman.
- ▶ India is among Oman's top trading partners.
- ▶ India is the 2nd largest market for Oman's crude oil exports for the year 2022 after China.
- ▶ India is also the 4th largest market for Oman's non-oil exports for the year 2022 after UAE, US and Saudi Arabia and 2nd largest source of its import after UAE.
- ▶ Indian companies have invested in Oman in sectors like iron and steel, cement, fertilisers, textile etc.
- ▶ India-Oman Joint Investment Fund (OJIF), a JV between State Bank of India and State General Reserve Fund (SGRF) of Oman, a special purpose vehicle to invest in India, has been operational.

- ◆ **Indian Community in Oman:** There are about 6.2 lakh Indians in Oman, of which about 4.8 lakh are workers and professionals. There are Indian families living in Oman for more than 150-200 years.

Significance of Oman for India:

- ◆ **Geographical:** Oman is at the gateway of Strait of Hormuz through which India imports one-fifth of its oil imports.
- ◆ **Defence cooperation** has emerged as a key pillar for the robust India-Oman strategic partnership. Defence exchanges are guided by a Framework MOU which was recently renewed in 2021.
- ▶ Oman is the only country in the Gulf region with which all three services of the Indian armed forces



conduct regular bilateral exercises and staff talks, enabling close cooperation and trust at the professional level.

- ◆ **Geopolitical Cooperation:** Oman also actively participates in the **Indian Ocean Naval Symposium (IONS)**.

Key Facts:

- **Border Countries:**
 - United Arab Emirates (UAE) to the northwest.
 - Saudi Arabia to the west and southwest.
 - Yemen to the southwest.
- **Deserts:** The largest desert in Oman is the Rub' al Khali or the "Empty Quarter," one of the largest continuous sand deserts in the world.



- ◆ Also in addition, there are many political parties including the **Indian National Congress**, which use a flag similar to the national flag, which is also against the spirit of the RPA.
- ◆ In its reply filed in 2019, the **Election Commission** had said that in 2005 it took a policy decision not to register any political party having a name with religious connotations and thereafter, no such party has been registered.
- ◆ However, any such party registered **before 2005** will not lose its registration for having a name with a religious connotation.

What is an Election symbol?

- ◆ An electoral or election symbol is a standardized symbol allocated to a political party.
- ◆ They are used by the parties during their campaigning and are shown on Electronic Voting Machines (EVMs), where the voter chooses the symbol and votes for the associated party.
- ◆ They were introduced to facilitate voting by illiterate people, who can't read the name of the party while casting their votes.

Provisions under the Election Symbols (Reservation and Allotment) Order, 1968:

- ◆ In 1968, the **Election Commission (EC)** promulgated this order, which provided for **specification, reservation, choice and allotment of symbols at elections** in Parliamentary and State Assemblies' constituencies.



BANNING PARTY NAME ON RELIGIOUS

Context: The Delhi High Court has mentioned that the issues raised in a petition seeking de-registration of political parties having names with caste, religious, ethnic or linguistic connotations and flags resembling the tricolour have to be decided by the Parliament as it is not in the domain of judiciary.

About the issue:

- ◆ It has referred to political parties such as Hindu Sena, All India Majlis-e-Ittehadul Muslimeen and Indian Union Muslim League as examples of names with religious connotations and said this was "against the spirit" of the **Representation of Peoples Act (RPA)** and the Model Code of Conduct.

A reserved symbol is one that is **allocated to a political party** while a free symbol is available to be allocated to non-recognized parties and independent candidates.

- ◆ It also had provisions regarding the **registration and recognition** of political parties as state and national parties.
- ◆ The Election Symbols Order also provided for **resolution of disputes** in cases involving splits in recognized parties or merger of two or more political parties.
- ◆ Symbols are reserved for political parties and Paragraph 5 of the order distinguishes between a reserved and a free symbol.
- ◆ Also, political parties are divided into **regional or state and national parties**, or registered and unregistered parties.
- ◆ However, Paragraph 6 of this order states the conditions which a party has to fulfill to become a **national or a state party**.



TELECOMMUNICATIONS BILL, 2023 PASSED IN LOK SABHA

Context: The New telecommunications Bill 2023 has been introduced in parliament to overhaul Telecom sector in India w.r.t. changing global landscape: 6G, Internet revolution etc.

- ◆ In the **dynamic landscape** of global technology governance, the recent **Telecommunications Bill, 2023** in India stands as a pivotal moment.
- ◆ This comprehensive legislation not only marks a **significant departure from archaic laws** dating back to the colonial era but also addresses critical facets of the evolving **telecommunications sector**.



Background:

- ◆ The Telecommunications Bill, 2023 **replaces** the **antiquated Indian Telegraph Act, 1885**, along with the **Indian Wireless Telegraphy Act, 1933**, and the **Telegraph Wires (Unlawful Possession) Act, 1950**.
- ◆ It also brings about crucial amendments to the **Telecom Regulatory Authority of India (TRAI) Act, 1997**, ushering in a new era of regulatory frameworks and governance.

Structural Changes and Authorization:

- ◆ A **significant shift** lies in the move from a **licensing regime to an authorization system**.
- ◆ The **Bill streamlines the cumbersome licensing processes**, consolidating more than 100 types of licenses into a **single authorization for telecom operators** and service providers.
- ◆ This and foster a more efficient and transparent system. **structural change aims to simplify the regulatory landscape**

Spectrum Assignment and Allocation:

- ◆ The Bill introduces a preference for **spectrum**

assignment through auctions, emphasizing transparency and market-driven allocation.

- ◆ However, **exceptions exist** for certain sectors such as **metro rails, community radio, defense, railways, and police, where administrative allocation will be employed.**
- ◆ The legislation also allows for the **repurposing of spectrum**, enabling its use for different technologies, promoting flexibility and optimal utilization.

Security and Interception Measures:

- ◆ In the context of national security and public safety, the **Bill grants the government the power of interception, monitoring, and blocking of messages on telecom networks.**
- ◆ It upholds the **"trusted sources"** regime, established after the 2020 Indo-Chinese border skirmishes, and introduces a voluntary undertaking system for telecom operators to self-report compliance lapses.
- ◆ The legislation maintains provisions for **lawful interception and surveillance of telecom communications**, further fortifying security measures.

Right of Way and User Protection:

- ◆ The Bill introduces provisions for telecom infrastructure providers to seek a **right of way over public or private property**, promoting the establishment of robust telecom networks.
- ◆ Additionally, it emphasizes user **protection measures, including biometric authentication for customers**, aimed at curbing spam calls and messages.
- ◆ The central government may **prescribe standards and assessments for telecom equipment, infrastructure, networks, and services.**

Satellite Spectrum Allotment and Global Harmonization:

- ◆ A notable aspect of the Bill is its **opening of doors for satellite spectrum allotments**, aligning with global norms.
- ◆ This move is expected to **benefit satellite internet providers**, including Bharti-backed OneWeb and SpaceX's Starlink.
- ◆ The decision to allocate **satellite spectrum through an administrative method** is seen as a **strategic choice** to foster international cooperation, innovation, and competitiveness.

Digital Bharat Nidhi and Universal Service Obligation Fund:

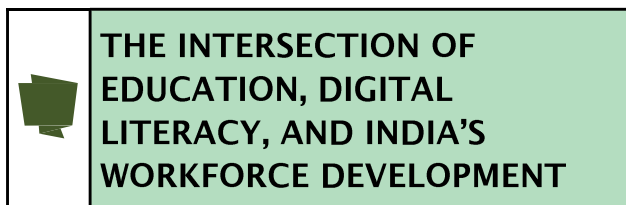
- ◆ The Bill introduces the **Digital Bharat Nidhi, formerly**

known as the **Universal Service Obligation Fund**, reflecting a commitment to extending telecom services to underserved areas.

- ◆ This renaming aligns with the evolving **digital landscape and underscores the fund's expanded scope**, now including research and development activities.

Concerns and Future Directions:

- ◆ While the Telecommunications Bill, 2023 signifies a progressive leap in **telecom regulation, concerns linger regarding its potential impact on internet-based communication platforms.**
- ◆ The **broad definition** of telecommunication services has sparked debates about the inclusion of online platforms, necessitating further consultations for clarity.
- ◆ The enactment of the Telecommunications Bill, 2023 represents a landmark moment in India's journey toward a modernized regulatory framework for the telecommunications sector. **Striking a balance between innovation and regulation**, the legislation aims to propel the nation into a new era of digital connectivity, security, and global competitiveness. As the technological landscape continues to evolve, the implications of this comprehensive bill are poised to shape the future trajectory of telecommunications in India.



Context: The linkage of Education, employment, quality of labour in the fast changing digital landscape, amidst India's push for literacy and skills make Digital literacy a pivot to realize development.

About:

- ◆ India, with its focus on **educational access and a growing digital landscape**, stands at the crossroads of the **"demographic dividend" and the emerging "digital dividend."**
- ◆ The quality of the labour force, crucial for the nation's developmental needs, hinges on empowering the youth to fulfill their aspirations and contribute meaningfully to the economy.

Educational Landscape and Transition Rates:

- ◆ The **Right to Free and Compulsory Education**

(2009) has significantly improved elementary schooling, reducing the percentage of out-of-school children aged 6-14 to 2.8% by 2018.

- ◆ Despite **challenges in transitioning to secondary education**, the proportion of 15-16 year olds not enrolled decreased from 16.1% in 2010 to 13.1% in 2018.

Covid-19 Disruptions and Enrolment Patterns:

- ◆ The **extended closure** of schools due to the Covid-19 pandemic raised **concerns about learning loss and potential dropout rates.**
- ◆ **Contrary to fears**, enrolment data during the pandemic showed a **minor increase in out-of-school** numbers for the **6-10 age** group, likely due to **delayed recording.**
- ◆ However, the **proportion of 6-14 year olds not in school decreased to 1.6% in 2022**, showcasing resilience.
- ◆ Moreover, the **out-of-school proportion for 15-16 year olds dropped from 16.1% in 2010 to 7.5% in 2022.**

The Digital Transformation:

- ◆ The Covid-19 years witnessed a positive shift with the **penetration of smartphones** in rural India.
- ◆ While mobile coverage was nearly universal, **smartphone ownership in rural households increased from 36% in 2018 to 74.8% in 2022.**
- ◆ **Access to digital devices** became critical for education and livelihoods during the pandemic.

Digital Literacy's Crucial Role:

- ◆ The **World Development Report** emphasizes the **"digital dividend"** that can result from bridging the digital divide.
- ◆ As more youth **complete elementary education and transition** to the secondary stage, India is well-positioned to harness both the **demographic and digital dividends.**
- ◆ However, this requires a focus on **digital literacy.**

ASER 2022: Spotlight on Rural Youth:

- ◆ The **Annual Status of Education Report (ASER) 2022** focuses on rural youth aged 14 to 18.
- ◆ Understanding their **choices, educational pursuits, work aspirations, and digital engagement** provides insights for **targeted support and policymaking.**

EdTech and Digital Literacy:

- Given the recent emphasis on **EdTech in delivering educational resources**, understanding **youth's digital literacy is crucial**.
- Exploring the types of digital activities they engage in and assessing their **ability to perform digital tasks** is essential for effective implementation of digital education tools.

The Call for Support:

- To harness the full potential of India's youth, a **comprehensive approach is needed**.
- This includes addressing **educational needs, fostering digital literacy, and ensuring that the workforce is equipped** to navigate the evolving demands of the economy.
- The **confluence of education, digital literacy, and workforce development is pivotal** for India's sustainable growth.
- A well-supported and digitally literate youth population is the cornerstone for realizing both demographic and digital dividends in the years to come.
- In an era defined by **rapid technological advancements**, the concept of digital literacy has **transcended mere proficiency with digital devices. It has evolved into a cornerstone for socio-economic progress**, affecting various facets of our lives, particularly in the realms of employment, skills acquisition, labour dynamics, and overall developmental trajectories.

Digital Literacy as a Catalyst for Employment:

- Digital literacy is no longer a luxury but a **prerequisite for active participation in today's job market**.
- The burgeoning digital landscape demands a workforce equipped with the ability to **navigate digital tools, platforms, and data**.
- Employability, once primarily linked to academic qualifications, now hinges on an **individual's digital acumen**.
- From basic computer skills to more advanced capabilities like data analysis and programming, **digital literacy acts as a bridge**, connecting job seekers with a myriad of employment opportunities.

Skill Enhancement and the Digital Dividend:

- The evolving nature of work necessitates a **continuous cycle of skill development. Digital literacy serves as the linchpin in this process**, enabling individuals to adapt to emerging technologies and industry trends.

- As **industries embrace automation, artificial intelligence, and data analytics**, individuals with robust digital skills are better positioned to contribute meaningfully.
- The **"digital dividend" referenced in the World Development Report** becomes evident as societies empower their workforce with the skills needed for the digital age.

Labour Dynamics in the Digital Era:

- The digital revolution has **reshaped traditional notions of labour**.
- Remote work, gig economies, and digital entrepreneurship** have become prominent features of the contemporary employment landscape.
- Digital literacy plays a pivotal role in **fostering the flexibility and adaptability** required for these evolving work structures.
- It **empowers individuals to participate** in the gig economy, up skill themselves independently, and engage in remote work opportunities, transcending geographical constraints.

Developmental Impact:

- A digitally literate populace is instrumental in **driving sustainable development**. Access to information, online education, e-governance, and digital healthcare are components of an inclusive developmental agenda.
- Digital literacy not only facilitates **participation** in these domains but also enhances the **efficiency and effectiveness of development initiatives**.
- Bridging the digital divide** becomes a crucial step in ensuring that the benefits of technological progress are accessible to all, contributing to the overarching goal of sustainable and inclusive development.



HOW DOES GOVERNMENT POLICY IMPACT MICROECONOMICS?

Context: Government policy has microeconomic effects whenever its implementation alters the inputs and incentives for individual decisions.

What is microeconomics?

Microeconomics studies **individual economic behaviors**, focusing on how decisions by individuals, households, and businesses shape the allocation of resources.

Microeconomic Dynamics:

- ◆ Microeconomics scrutinizes the **interplay of supply and demand**, elucidating **how individuals respond to shifts in incentives, prices, resources, or production**.
- ◆ Subgroups **like buyers, sellers, and business owners** form the crux of microeconomics, steering supply and demand, money usage, and interest rate dynamics.

Government Intervention Examples

- ◆ Governments wield influence over **goods' quantity**, altering supply, and regulating funds directed toward goods, impacting demand.
- ◆ Policies may render **certain trades illegal**, reshaping economic behaviors on a micro scale.
- ◆ Macroeconomics, on a larger scale, contrasts with microeconomics, focusing on national or global economic analyses.

Policies Affecting Individuals and Firms

- ◆ **Subsidies to farmers** enhance profitability and stimulate farm production.
- ◆ A **sales tax on cigarettes or alcohol** can alter individual buying behaviors.
- ◆ **Fiscal policies**, through government spending and taxation, influence aggregate demand, rippling through wages and prices.
- ◆ **Monetary policies**, manipulating money supply and interest rates, affect individual loan rates.

Taxation's Microeconomic Impact

- ◆ **Non-voluntary government policies**, primarily financed by taxes, compel individuals and businesses to adjust spending or increase production to counteract tax impacts.

Macro Policies and Micro Outcomes

- ◆ **Positive macroeconomic policies** during economic turmoil may inadvertently hamper individual firms. For instance, **propping up wages** during the Great Depression made hiring extra employees unprofitable for individual firms.

Government Spending's Market Effects

- ◆ **Government spending can disrupt markets**, constituting a **wealth transfer** from taxpayers to entities receiving government funds. Subsidized businesses may operate on a cost curve not feasible without the subsidy, affecting other market participants.



INTERNATIONAL ENERGY AGENCY'S COAL 2023 REPORT

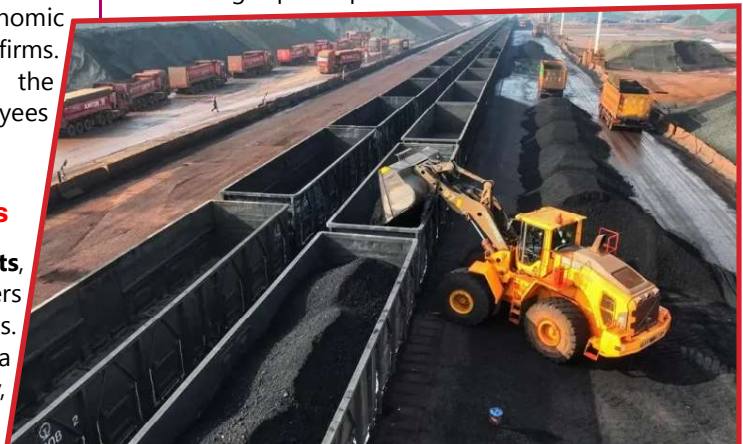
Context: The International Energy Agency's (IEA) annual coal market report predicts a significant shift in the trajectory of global coal demand, hinting at a structural decline by 2026.

- ◆ This anticipated transformation is influenced by various factors, including the expansion of **renewable energy** and a rise in **nuclear generation** in key regions.

What are the Key Highlights of the Report?

◆ Global Coal Demand Trends:

- ▶ Global coal demand reached a record high in 2022 amid the global energy crisis, rising by **4% year-on-year to 8.42 billion tonnes (Bt)**.
- ▶ Asia remains the primary driver of coal demand growth in both power and non-power sectors.
- ◆ China experienced a demand rise of 4.6%, equivalent to 200 million tonnes (Mt) of coal.
- ▶ India saw a substantial increase of 9%, amounting to 97 Mt.
- ▶ Indonesia witnessed a remarkable surge of 32%, reaching 49 Mt, driven by nickel smelters.
- The United States faced an 8% decline in coal demand, totalling 37 Mt, the most significant drop among major markets.
- Europe, despite a 4.3% increase in consumption, exhibited more restrained growth than anticipated.
- Subdued hydropower and nuclear electricity generation in certain European countries.
- A weak economy and mild winter in Europe contributed to the restrained impact of natural gas price spikes.



◆ Future Projections and Uncertainties:

- ▶ Anticipated decline in coal demand in most advanced economies during 2023.
- ▶ Overall, global coal **consumption in 2026 is projected to be 2.3% lower than in 2023.**

◆ Despite the expected decline, global coal consumption is projected to remain **above 8 billion tonnes through 2026**, highlighting its continued role as a significant source of **carbon dioxide emissions.**

- ▶ **China, India, and Indonesia, the three largest coal producers globally**, are expected to break output records in 2023, pushing global production to a new high in 2023. These three countries **now account for more than 70% of the world's coal production.**

◆ In China and India, in particular, rising coal consumption is driven by robust growth in demand for electricity and low **hydropower** output.

◆ Factors Influencing Decline in Coal Demand:

- ◆ The decline in coal demand is attributed to a **global shift towards renewable energy sources.**
- ◆ The IEA links the expected decline to changes in global climate, with **El Nino conditions transitioning to La Nina**, potentially leading to **increased hydropower output.**
- ◆ The report highlights a significant upward trend in **low-cost solar photovoltaic deployment**, contributing to the growth of renewable power generation.
- ◆ **Nuclear generation** is expected to see moderate increases, particularly in China, India, and the European Union, further influencing coal-fired generation.

◆ China's Dominance in Coal Markets:

- ▶ China's coal consumption is expected to fall in 2024 and remain steady through 2026.
 - Hydropower output is set to recover, while electricity generation from solar PV and wind is expected to increase significantly in China.
- ▶ The pace of **economic growth in China and its coal use is uncertain**, as the country undergoes major structural changes.
- ▶ India, Indonesia, and other emerging economies are expected to rely on coal for economic growth, despite commitments to deploy renewables.

◆ Efforts to reduce the use of **'unabated' coal**, in line with the **28th Conference of Parties (COP28)** are deemed essential for meeting international climate targets, aiming for a **nearly 95% reduction in coal emissions between 2020-2050.**

What is the International Energy Agency?

- **About:** The International Energy Agency (IEA), which has its headquarters in Paris, France was set up as an autonomous agency in 1974 by member countries of the Organisation for Economic Cooperation and Development (OECD) in response to the mid-1970s oil crisis.
- The IEA's main focus is on energy policies, which include economic development, energy security, and environmental protection.
- The IEA also plays a major role in providing information related to the international oil market and taking action against any physical disruptions in the supply of oil.

Members:

- The IEA family is made up of 31 member countries, 13 association countries including India, and 4 accession countries.
- A candidate country to the IEA must be a member country of the OECD.



HOW TERMS OF TRADE HAVE MOVED FOR AGRICULTURE

Context: Terms of trade (ToT) for Indian agriculture — movement in prices of farm commodities relative to that of non-farm goods and services — have recorded significant improvement in the last decade and a half, going by data derived from national income statistics.

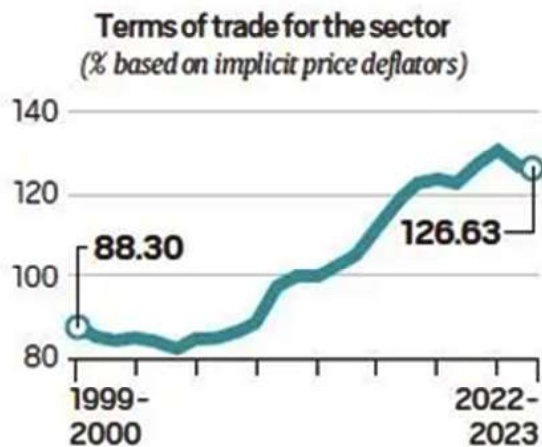
Terms of Trade (ToT):

- Ratio of average prices of a country's **exports to imports.**
- Reflects the purchasing power of a country in international trade.
- Improvement: When export prices rise relative to import prices.
- **Impact:** Favorable ToT can enhance economic well-being, while unfavorable ToT may pose challenges for a nation's economy.
- **Calculation:** $\text{ToT} = (\text{Export Price Index} / \text{Import Price Index}) \times 100.$

What is Terms of Trade mean?

- ◆ ToT signifies the movement in prices of **farm commodities relative to non-farm goods.**
- ◆ Chand and Singh's study reveals a significant improvement in ToT for Indian agriculture.

WHAT THE CHANGE HAS BEEN LIKE



What are Deflators?

Deflators are economic indicators used to adjust nominal values, such as GDP or GVA (Gross Value Added), for the effects of inflation or changes in price levels. They help convert nominal values expressed in current prices into real values expressed in constant prices, allowing for a more accurate comparison of economic performance over time.

What is Implicit Price Deflator?

- Applied to specific components, such as GVA in agriculture, industry, or services.
- Helps gauge inflation or deflation in individual sectors.

Decadal Shifts -

- From 1973-74 to mid-2000s, ToT for agriculture remained low, reaching 85 levels.
- Real recovery initiated in 2009-10, peaking at 130.2 in 2020-21.
- A dip to 126.6 in 2022-23 is noted.

Contributing Factors -

- Chand and Singh attribute India's agricultural growth (average of 3.7% p.a. from 2005-06 to 2021-22) to improve ToT.
- Factors include the global agri-commodity price boom and policy interventions like MSP hikes.

Analysis of Farmer and Labourer ToT-

- Farmer ToT saw a significant rise (17.3%) from 2004-05 to 2010-11, stagnating at 97-99 levels thereafter.
- Agricultural labourers experienced a more spectacular rise (109.2%) till 2016-17, followed by a decline to 119.5 in 2021-22.

Political Economy Implications-

- Accelerated non-agricultural employment growth impacted labour markets and real wages for agricultural labourers.
- Farmers faced increased costs without commensurate rises in produce prices, impacting their ToT.
- The stagnation in ToT for both farmers and labourers reflects the complex challenges in India's agrarian landscape.



INDIA'S SURPRISINGLY FAST GDP GROWTH AND THE ONGOING SURGE IN SENSEX

Context: According to a study, India Inc. corporate performance as well as the boost to private capital formation has been quite uneven — almost in line with the K-shaped consumption recovery.

- So, let us understand the K-shaped recovery and details.

Key Highlights of the Study:

- Surprising Growth in Q2:** Contrary to expectations, Q2 2023 witnessed a **robust 7.6% GDP** growth, primarily fuelled by a remarkable 14% expansion in the manufacturing sector.
- Stock Market Rally and Political Wins:** The GDP surge **coincided with BJP's electoral victories**, igniting a rally in Indian stock markets. **Foreign investors** showed **renewed interest** while retail investors reached historic highs.
- Consumption Struggles Amid Urban-Rural Divide:** Despite positive economic indicators, data reveals a

persistent struggle in **average Indian consumption levels**, with a noticeable urban-rural gap.

- ◆ **Unravelling the GDP Surge:** Analysts question the triggers behind the unexpected GDP growth, exploring whether it marks the **end of the economic slowdown** or **signals a new growth phase**.
- ◆ **K-Shaped Industrial and Consumption Recovery:**
 - ▶ India's recovery exhibits a K-shaped pattern, with disparities in consumption and industry performance. While some sectors thrive, others face challenges.
 - ▶ India's consumption recovery follows a K-shaped trajectory, accentuated by an urban-rural divide and a shift toward premium products.

What is K-shaped recovery?

- The "K-shaped" economic recovery is characterised by a stark split in the recovery pace of the economy— some sectors are bouncing back ahead of the rest at a much faster pace, while others are continuing a downward trajectory.
- K-shaped recovery occurs if different sectors recover at different rates.



- ◆ **Manufacturing Output Surge:** The surge in Q2's manufacturing output is dissected, revealing a 14% growth in gross value added (GVA). Company profits soar despite modest net sales growth.
- ◆ **Impact on Sensex and Stock Prices:** The rise in company profits resonates in stock markets, enticing investors. This, coupled with falling input prices, contributes to the surge in stock prices.
- ◆ **Investment Trends and Private Sector Participation:** Examining investment patterns, some sectors benefit from the government's capital expenditure push, potentially signaling private sector resurgence.
- ◆ **Uneven Capacity Expansion:** While profits surge, the study indicates uneven growth in capacity utilization across sectors. Industries linked to premium consumption and government capex outperform.

Impact of India's Economic Recovery-

Stock Market Boost:

- ◆ The robust economic recovery reflected in GDP growth has energized stock markets, **attracting domestic and foreign investors**.
- ◆ **Increased market participation** could stimulate **capital inflow**, fostering economic stability and expansion.

Political Implications:

- ◆ The economic upturn **coinciding with political wins** may bolster the ruling party's image.
- ◆ Positive economic indicators may **enhance public perception**, potentially influencing political landscapes.

Urban-Rural Disparity:

- ◆ The K-shaped recovery **accentuates the gap between urban and rural consumption** levels.
- ◆ Addressing this divide becomes crucial to ensure inclusive growth and social stability.

Manufacturing Sector Surge:

- ◆ A significant **surge in manufacturing output** contributes to **overall GDP growth**.
- ◆ Strengthening the manufacturing sector can lead to **job creation and increased export** potential.

Uneven Investment Patterns:

- ◆ Sectors benefiting from government capex witness growth, while others lag.
- ◆ **Addressing imbalances** in private sector participation becomes essential for a more uniform and sustained recovery.

Capacity Utilization Dynamics:

- ◆ Varied capacity utilization levels across sectors indicate a **nuanced recovery**.
- ◆ **Tailoring policies** to support sectors with lower capacity utilization could **optimize overall economic performance**.

Private Sector Resurgence:

- ◆ Signs of private sector resurgence align with government objectives.
- ◆ Encouraging private investment can amplify the economic recovery, creating a more sustainable growth trajectory.



ARCTIC REPORT CARD 2023

Context: As per a recent study, Alaska Indigenous cultures have an important influence of fishing and related activities and thus needs attention for conservation due to climate change.

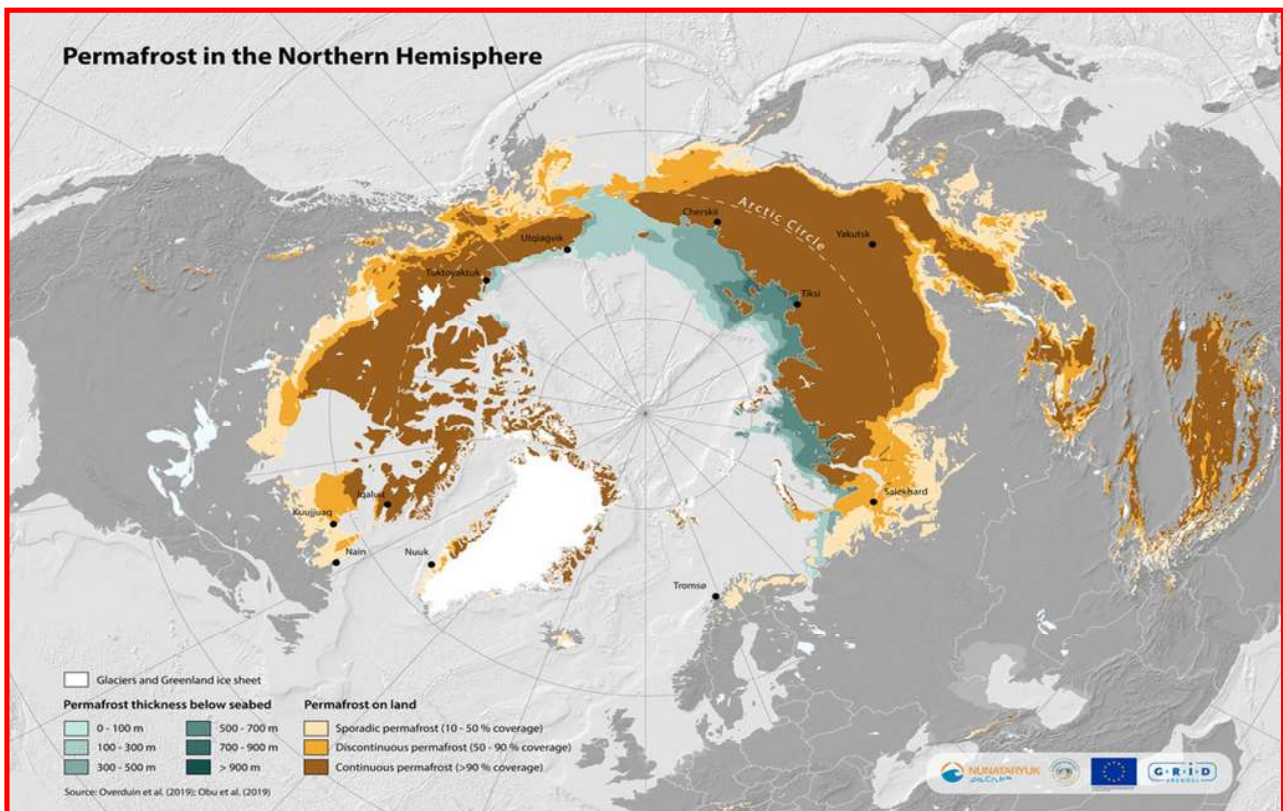
About the recent updates from Arctic:

- ❖ **Warmest summer:** The year 2023 has etched its mark in history as the Arctic experienced its **warmest summer** on record, leaving a profound impact on ecosystems and communities across the region.
- ❖ **Ice Melting:** From raging wildfires in Canada to

unprecedented melting in Greenland, the signs of climate change are undeniable.

Highlights of the study:

- ❖ **2023 Arctic Report Card:** The **2023 Arctic Report Card** delves into the underexplored realm of subsea permafrost, a hidden danger escalating due to warmer ocean temperatures.
- ❖ **Subsea permafrost thawing:** With vast expanses of **subsea permafrost thawing**, the **release of methane and carbon dioxide poses a serious threat to global warming and ocean acidification.**
- ❖ **Need for research:** The report highlights the urgent **need for research** to gauge the extent and intensity of the potential consequences.



What are reasons behind the condition?

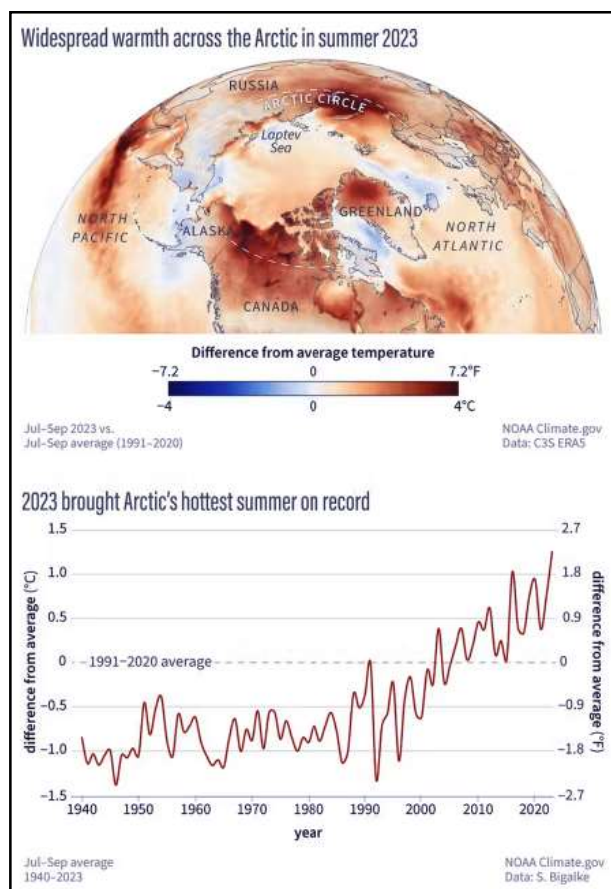
- ❖ **Rising temperatures:** Canada faced a summer of turmoil as **wildfires forced evacuations**, fueled by a combination of **rising air temperatures and dry conditions**.
- ❖ **Early snowmelt:** The Northwest Territories bore witness to **early snowmelt**, exposing vast areas to intense heat, contributing to a record-low North American snowpack.
- ❖ **Cascading effects:** By November 2023, a staggering 70,000 square miles had succumbed to wildfires.

emphasizing the **cascading effects** of climate change.

Other Factors contributing:

- ❖ **Mackenzie River and warm water:** The mighty **Mackenzie River** played a pivotal role in the warming trend, carrying warm water into the Beaufort Sea, accelerating sea ice melting and impacting Alaska's coastline.
- ❖ **Decline of sea ice in Siberia:** Similar patterns were observed in western Siberia, amplifying the **decline of sea ice in the Kara and Laptev seas north of Russia**.

- ◆ **Rising fall temperatures:** The Arctic's diminishing sea ice emerges as a significant contributor to **rising fall temperatures**, perpetuating a cycle of heat absorption and release.



Impacts on Indigenous Communities: Disrupted Lives and Livelihoods

- ◆ **Indigenous communities:** Arctic inhabitants, particularly **indigenous communities**, are grappling with tangible effects of climate change.
- ◆ **Shifts in sea ice patterns:** Shifts in sea ice patterns, unreliable river ice for travel, and the **sinking of infrastructure due to thawing permafrost** are disrupting traditional ways of life.
- ◆ **Western Alaska:** The article sheds light on the struggles of Indigenous communities in **Western Alaska**, where the **decline of Chinook salmon** jeopardizes cultural practices and food security, underscoring the human dimension of climate change.

Adaptation and Healing: Initiatives in the Face of Change

- ◆ **Adaptation of Communities:** Amid challenges, communities are adapting and initiating efforts to heal their landscapes.

- ◆ **Sámi reindeer herders and conservationists:** In **Finland**, collaboration between **Sámi reindeer herders and conservationists** aims to restore degraded reindeer habitat, simultaneously preserving cultural practices and mitigating climate change.

Way Forward:

- ◆ As **temperatures in the Arctic soar at a rate three times faster than the global average**, the 2023 Arctic Report Card serves as a stark reminder of the risks associated with climate change.
- ◆ Beyond statistics, it illuminates **the lives and cultures already disrupted by environmental shifts**.
- ◆ The urgency for **collective action** to address climate change and **protect the Arctic ecosystem** has never been more apparent.



COP AND FOSSIL FUEL ELIMINATION STRATEGY

Context: While India has consistently stepped up renewable capacity addition, policymakers have realised that the country simply cannot keep adding more green capacity unless it has viable energy storage options.

About:

- ◆ The recently concluded 2023 **United Nations Climate Change Conference, COP28**, witnessed heated debates, with the most contentious issue being the **phase-out of fossil fuels**.
- ◆ The final agreement emphasized a **"transition away from fossil fuels,"** omitting the explicit mention of "phase-out" due to strong opposition, particularly from countries like India, China, and South Africa.

India's Coal Pivot:

- ◆ Just days before COP28, India's Union Power Ministry surprised many by announcing plans to **increase coal-powered generation capacity**. The decision marked a policy reversal, deviating from the earlier emphasis on renewable energy.
- ◆ **India aims to add at least 80 gigawatts (GW)** of coal capacity by 2031-32, indicating a shift in focus towards coal for base load capacity.
- ◆ India has significantly **increased renewable capacity** over the past decade, becoming the **world's third-largest producer of renewable energy**.
- ◆ However, the **operational challenges of integrating renewables** into the grid, particularly the issue of intermittency, have prompted policymakers to

reconsider the rapid expansion of green capacity without viable energy storage options.

Challenges:

- ◆ **Storage Alternatives:** Energy storage is deemed crucial to counter the **variability in renewable generation**.
- ◆ While **lithium-ion storage batteries are considered unviable**, the government is exploring alternatives such as **hydrogen and hybrid generation models blended with off-stream pumped storage**. These measures aim to balance the intermittent nature of renewable sources.
- ◆ **Renewables Cost Challenges:** The **concept of renewables achieving grid-parity is questioned**, with the acknowledgment that the cost of standby **thermal power makes renewable power almost twice as expensive on paper**.
- ◆ The **renewables challenge is further compounded by rigid power purchase agreements (PPAs)** and the expensive nature of current storage options.

Way Forward:

- ◆ India faces a complex energy dilemma, **balancing the resurgence of coal for baseload capacity with the challenges posed by the intermittent nature of renewables** and the pressing need for effective energy storage solutions.
- ◆ The decisions made in the **aftermath of COP28** signal a nuanced approach towards achieving a sustainable and reliable energy mix.

New marine amphipod species found in Chillika Lake, Odisha

Shrimp-like crustacea named *Demaorchestia alanensis*

- ◆ The specimens were deposited in the Zoological Survey of India's Estuarine Biology Regional Centre, Gopalpur-on-Sea, Odisha for further research, said Lipika Tarafdar, another researcher and the third co-author.

About *Demaorchestia alanensis*

- ◆ The study has revealed that the new species is white in colour and less than 15 millimetres in length.
- ◆ It has 13 pairs of legs.
- ◆ While three pairs are used for swimming in the water, eight pairs are used for walking on land. The other two pairs are used for capturing prey and feeding, Patro said.

About Amphipods

- ◆ Amphipods are a significant group in the marine ecosystem and play a vital role in the marine food chain. They also serve as indicators for studying the impact of climate change and health of coastal ecosystems, he said. Further research will delve deeper into understanding the specific ecological roles of amphipods in coastal and marine environments

About family Talitridae

- ◆ The family Talitridae was considered **one of the oldest groups of amphipods**, and it was believed to have been on the planet **since the Jurassic age**.
- ◆ It is divided into four **subfamilies**: Talitrinae, Floresorchestiinae, Pseudorchestoideinae and Platorchestiinae.

NITI AAYOG REPORT ON 'A GREEN AND SUSTAINABLE GROWTH AGENDA FOR THE GLOBAL ECONOMY'

Context: The report will add to the body of knowledge on the subject and will also provide valuable inputs for Brazil as it takes over the G20 presidency from India"

- ◆ The report launch was a significant effort of NITI Aayog in Partnership with IDRC and GDN paving the way for green and sustainable growth.

Highlights of the Report:

I. G20 Report Launch:

- ◆ **Participants:** Ministry of Environment, Forest & Climate Change, NITI Aayog, Sherpa, G20 India, and other dignitaries.
- ◆ **Organizers:** NITI Aayog in collaboration with the International Development Research Centre (IDRC) and the Global Development Network (GDN).

II. Collaborative Effort and Global Experts' Involvement:

- ◆ **Expert Involvement:** 40 leading experts from 14 countries contributed to the report.

V. Minister's Address and India's Climate Stance:

- ◆ Praises NITI Aayog for the report release.
- ◆ India's resolve for collaborative climate action.

- ◆ Emphasis on a swift, just, and equitable transition to renewable energy.
- ◆ Climate finance and technology crucial for sustainable growth.
- ◆ Developed countries' responsibility to help combat climate change.

VI. G20 New Delhi Leaders' Declaration and Finance Needs:

- ◆ **Declaration Highlights:**
 - ▶ Urgency and importance of accelerating global growth.
 - ▶ Free trade critical for lifting populations above the poverty line.
 - ▶ Revitalization of the World Trade Organisation advocated.
- ◆ **Finance Needs:** Trillion-dollar requirement by 2030 as per G20 New Delhi Leaders' Declaration.

VII. G20 Sherpa's Views and WTO Revitalization:

- ◆ **NITI Aayog Views:**
 - ▶ Complements NITI Aayog for the conference and report.
 - ▶ Inputs from the conference incorporated into the New Delhi Leaders' Declaration.
 - ▶ Emphasizes the critical role of free trade and the need to revitalize the World Trade Organisation.

X. Just Transition and Economic Impact:

- ◆ **Theme:** Just transition as a critical pathway to mitigating climate change.
- ◆ **Economic Impact:** Positive economic outcomes for developed and emerging economies discussed.

XI. Way Forward: Collective Commitment to Sustainability:

- ◆ **Commitments:** Participants committed to shaping a more sustainable and equitable world.
- ◆ **Event Significance:** Underscores the importance of collective efforts in addressing global challenges.



MRNA, THE NEXT FRONTIER FOR PERSONALIZED MEDICINE

Context: The mRNA (messenger RNA) technology has emerged as a groundbreaking platform in the realm of personalized medicine, showcasing the ability to be easily customized for effective and tailored therapies with minimal side effects.

Understanding the Basics of mRNA:

- ◆ At its core, **mRNA is a scalable and versatile molecule** that plays a vital role in cellular functions.
- ◆ Unlike traditional drugs, **mRNA is inherently present within the human body**, with cells naturally creating mRNAs to serve as instructions for protein synthesis.
- ◆ When cells need to **produce specific proteins essential for various functions, they rely on mRNA** as the messenger carrying the genetic code or recipe for protein creation.

Why mRNA Makes Excellent Medicine?

- ◆ The **unique qualities of mRNA** make it an ideal candidate for therapeutic applications.
- ◆ Scientists can **manipulate mRNA to create powerful medicines** that address diverse cellular issues.
- ◆ Since the **language of mRNA consists of four nucleotides**, scientists can easily decipher the codes and understand the instructions for protein synthesis.
- ◆ **Mutations in the DNA can disrupt these instructions**, leading to diseases, and **mRNA medicines offer a way to correct or replace these faulty instructions**.
- ◆ The production of mRNA treatments is not only **scalable but also consistent**.
- ◆ Unlike traditional drugs that require distinct manufacturing methods for each compound, the **process of creating mRNA remains the same for all types**.
- ◆ This **uniformity simplifies the production process**, making it akin to mastering a basic recipe and allowing for endless variations.
- ◆ Moreover, the **transient nature of mRNA within cells allows for easy dosage adjustments** based on changing patient needs.
- ◆ As cells naturally destroy mRNA when it is no longer required, the **flexibility** in altering doses ensures that treatments can be fine-tuned to accommodate dynamic health conditions.

mRNA Vaccines and Beyond:

- ◆ The **mRNA technology gained significant recognition** with the development of **COVID-19 vaccines** by Moderna and Pfizer-BioNTech, marking the first FDA-approved mRNA-based medicines.
- ◆ These vaccines demonstrated the **adaptability of mRNA-based therapies**, enabling quick adjustments to target new viral variants.
- ◆ Beyond COVID-19, ongoing clinical trials explore mRNA-based vaccines for diseases such as **seasonal flu, herpes, respiratory syncytial virus, and more**.

mRNA in Disease Treatment:

- Expanding beyond vaccines, **mRNA holds promise in treating diseases like cancer.**
- Some mRNA cancer treatments operate as vaccines, **training the immune system** to specifically target cancer cells.
- By leveraging the **mutational landscape of cancer cells, mRNA cancer vaccines** can be personalized to match individual patients' specific cancer mutations.
- Clinical trials employing personalized mRNA approaches for cancers **like pancreatic cancer** are currently underway.
- The potential applications of mRNA-based medicine extend to **various diseases where correcting protein synthesis** holds the key to effective treatment.
- Ongoing research explores the use of mRNA in **heart disease, neurodegenerative disorders, bone loss,** and other conditions, offering hope for future protein replacement therapies.

The Future Landscape of mRNA-Based Medicine:

- The future **holds promise for treating diseases** arising from incorrect protein synthesis.
- Early studies show encouraging signs in areas such as wound healing for **diabetic patients** and addressing rare genetic disorders like **propionic acidaemia.**
- The ability to **easily customize and produce mRNA positions it as a transformative force** in personalized medicine.
- With ongoing advancements and a deeper understanding of mRNA's capabilities, this technology stands poised to **revolutionize medical treatments**, offering effective and tailored therapies with fewer side effects.

Key points about mRNA (messenger RNA) technology:

- Biological Molecule:** mRNA, or messenger RNA, is a type of biological molecule found in cells.

- Information Carrier:** It carries genetic information from DNA to the cellular machinery responsible for protein synthesis.
- Protein Synthesis:** mRNA provides the instructions for the cell to make specific proteins, crucial for various cellular functions.
- Scalability:** The ability to easily customize and produce mRNA in the laboratory makes it scalable for various applications.
- Medicinal Potential:** Scientists can create artificial mRNA to serve as a basis for developing new medicines and therapies.
- Personalized Medicine:** mRNA's customizable nature allows for the development of personalized and targeted therapies, minimizing side effects.
- Flexibility in Recipe:** The language of mRNA consists of nucleotides, and scientists can manipulate the mRNA "recipe" to create different proteins or address specific cellular issues.
- Temporary Nature:** mRNA is not permanent within cells; it is naturally destroyed after its purpose is fulfilled. This characteristic allows for easy adjustments to medication doses.
- Vaccine Development:** mRNA technology has been successfully used in the development of vaccines, such as the COVID-19 vaccines from Moderna and Pfizer-BioNTech.
- Future Applications:** Beyond vaccines, on-going research explores the potential of mRNA in treating various diseases, including cancer, heart disease, neurodegenerative disorders, and more.



**IAS
2024**

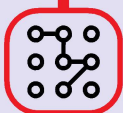
PRELIMS TEST SERIES 2024

**4600+
QUESTIONS**

**PRELIMS
PRACTICE
PROGRAMME
(PPP)**



PROGRAMME FEE
₹ 8,500 (+GST)



**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**

TOTAL 68 TESTS

33

**SUB SECTIONAL
TESTS**
50 QUESTIONS

12

**SECTIONAL TESTS
(GS & CSAT)**
100 & 50 QUESTIONS

07

**CURRENT AFFAIRS
TESTS**
100 QUESTIONS

16

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



8448496262



iasscore.in

Section B [SPECIALS]

Topic

🌀 India-Maldives Relations



INDIA-MALDIVES RELATIONS

Context: India and Maldives shares a vital relationship owing to their geo-strategic position. They share common interests and concerns ranging from being maritime neighbors to India acting as first responder in event for crisis for Maldives.

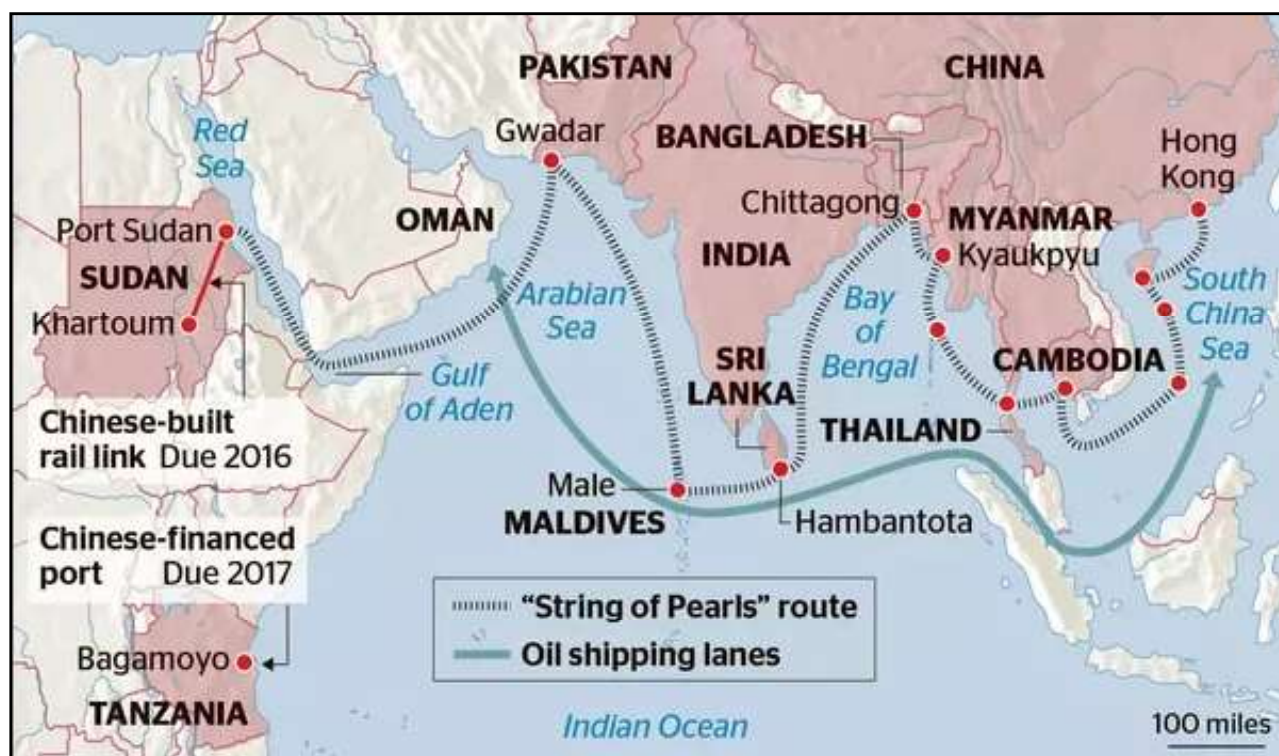
However in current times is treading through tough waters given the change in stance of Maldivian regime from India's first to India Out campaign.

This also presents a critical stance where the china factor creeps in. The current regime at Male is said to be more pro-china which has its own concerns for India given the Chinese tactics in Indian Ocean.

With the recent Maldivian Presidential elections, where Dr. Mohamed Muizzu's victory is perceived as a triumph for the 'India Out' campaign. The dynamics of India-Maldives relations have witnessed a critical juncture.

Geographic location of Maldives:

- ◆ Maldives, independent island country in the north-central Indian Ocean. It consists of a chain of about 1,200 small coral islands and sandbanks (some 200 of which are inhabited), grouped in clusters, or atolls.
- ◆ Is strategically located at the crossroads of several important trade routes that run through the Indian Ocean.
- ◆ 50% of India's external trade and 80% of India's energy imports transit through the Sea lanes of communication (SLOCs) in the vicinity of the Maldives.



India out Campaign vs. India First Policy:

The 'India Out' campaign is a political movement against the presence of the Indian military in the Maldives. The victory of Dr. Mohamed Muizzu aligns with this stance, posing a challenge to the traditionally upheld 'India First' policy.

The 'India First' policy, initiated by President Ibrahim Mohamed Solih, underscores Maldives' preference for India in security, socio-development assistance, and pandemic response.

Historical Background of Relations:

- ◆ India and Maldives share deep-rooted historical, cultural, and economic ties. The name Maldives has Sanskrit origin which translates into (Mala (garland) + Dweep (Island)).
- ◆ The islands is said to have been inhabited as early as 5th century BC by settlers from Sri Lanka and Southern India. There were close trade relationships between India and Maldives during ancient and medieval times.
- ◆ From early trade relationships to post-independence collaborations, the two nations have a shared history.

- ◆ However, political transitions in Maldives, particularly during Yameen's tenure (2013-2018), led to strains in relations due to pro-China policies.

Key Milestones:

- 1965: Diplomatic ties established; Indian Mission in Male (1972).
- 1978: Strengthening of ties during President Maumoon Abdul Gayoom's tenure.
- 1988: Indian intervention to thwart a coup attempt.
- 2018: Ibrahim Mohamed Solih's victory and adoption of India-First Policy.

- ◆ **Significance of Maldives for India:** The strategic importance of Maldives for India is multifaceted:
- ◆ **Geo-Economic Significance:** Maldives sits at the crossroads of vital trade routes in the Indian Ocean, critical for India's external trade and energy imports.
 - ▶ The Indian Ocean is recognized as a primary global trade and energy route, with Maldives positioned as a pivotal toll gate. It serves as a crucial point for two significant sea lanes of communication (SLOCs).
 - ▶ These SLOCs are vital for facilitating maritime trade between the Gulf of Aden and Gulf of Hormuz in West Asia and the Strait of Malacca in Southeast Asia.
- ◆ **Geo-Political Significance:** Maldives aligns with India in various regional groupings and supports India's global aspirations.
 - ▶ Maldives is a member of the Colombo Security Conclave (CSC), Indian Ocean Rim Association (IORA), SAARC, SASEC and SAGAR initiative of India.
- ◆ **Security Significance:** Maldives serves as a crucial partner in maritime security, countering terrorism, and ensuring the safety of sea lanes.
- ◆ **Indian Diaspora Significance:** A sizable Indian diaspora in Maldives contributes significantly to sectors like education, healthcare, tourism, and hospitality.

Areas of Cooperation: India's collaboration with Maldives spans economic, infrastructure, military, and humanitarian aspects:

- ◆ **Economic Cooperation:** India is a major economic partner, providing financial support and being a vital trading ally.
- ◆ **Infrastructure Cooperation:** Projects like the Greater Male Connectivity Project, airport redevelopment, and strategic harbours demonstrate India's commitment to Maldives' sustainable development.
- ◆ **Military and Security Cooperation:** Joint exercises,

comprehensive defence partnerships, and aid in maritime security highlight the military collaboration. India helped to prevent coup in 1988 which has the support of Tamil liberation forces.

- ▶ Maldives is also the India's first line of defence against terrorism, piracy on the high seas, drug trafficking, narcotics, and other maritime crime.
- ◆ **Humanitarian Assistance Cooperation:** From socio-economic development projects to COVID-19 aid, India consistently supports Maldives in times of need.
- ◆ **Socio-Economic development projects:** India provided covishield vaccines, handing over of two sea ambulances and gave aid in building of Indira Gandhi memorial hospital.
- ◆ **The creation of national Knowledge network for research and education.** Also Indian help was extended in establishment of Maldives National College for policing and Law enforcement.
- ◆ **Challenges in India-Maldives Relations:** Several challenges pose potential threats to the relationship:
- ◆ **Political Challenges:** The victory of leaders aligned with the 'India Out' campaign raises concerns about the future stance of the Maldivian government.
- ◆ **Radicalization:** Maldives faces challenges related to the radicalization of its citizens, which could pose security risks for both countries.
- ◆ **Growing Chinese Influence:** China's expanding influence in the region could limit India's diplomatic space in Maldives.
 - ▶ Maldives could get become pearl of China's 'string of pearls' surrounding India with bases. Further the Access to the Arabian Sea could conceivably permit China to project hard power in the region.
- ◆ **Climate Change:** Both nations, being low-lying islands, face the common threat of climate change, including rising sea levels.

Contemporary Issues and irritants

- ◆ The recently elected Maldivian government announced it would terminate a hydrography agreement signed with India in 2019.
- ◆ The decision came shortly after the newly elected administration asked India to withdraw its troops from the island country—a day after he took charge.

The Hydrography agreement:

- ◆ At the PM level visit in 2019 to the Maldives, the two sides signed a memorandum of understanding on hydrography cooperation. This paved the way for both sides to carry out maritime surveys and chart Maldivian territorial waters. For example, in

2022, the Indian Navy's INS Sutlej carried out a joint hydrographic survey with its Maldivian counterparts.

- ◆ The decision to cancel the renewal stemmed from national security concerns. Future hydrographic surveys will be carried out by the Maldives alone, given the nature of the "sensitive" information involved.
- ◆ According to the terms of this agreement, if one party wishes to drop the agreement, the other party must be informed of the decision six months before the agreement is set to expire. Other wise to the terms, the agreement automatically renews for an additional five years.

Withdrawal of Indian troops:

- ◆ Maldives Asked India to withdraw its military personnel from the Maldives.
- ◆ India provides two helicopters and an aircraft to the Maldives National Defence Force (MNDF) for emergency medical evacuations and disaster relief operations.
- ◆ This move was seen as a part of Indian Out campaign and inclination of present regime towards china.

Way Forward: To navigate these challenges and strengthen ties:

- ◆ **Engage Proactively:** India should actively engage

with the newly elected government, addressing concerns and emphasizing the mutual benefits of ongoing projects.

- ◆ **Increase Development Assistance:** A strategic increase in development aid, targeting projects with broad societal impacts, can enhance India's goodwill.
- ◆ **Timely Project Completion:** Ensuring timely completion of infrastructure projects will showcase India's reliability and competitiveness against Chinese initiatives.
- ◆ **Youth Employment Initiatives:** Prioritizing projects that enhance youth employability and entrepreneurship can counter radicalization and extremism.
- ◆ **Promote Mutual Understanding:** Encouraging the understanding that India's involvement is for mutual benefit, as opposed to external interests, is crucial for sustained cooperation.

Conclusion:

India-Maldives relations are at a pivotal juncture, requiring nuanced diplomacy, proactive engagement, and a commitment to shared prosperity to overcome the current challenges. The resilience of this relationship lies in recognizing mutual interests and fostering cooperation that goes beyond political transitions.



Section C [PRELIMS]

To Attempt
Weekly Current Affairs Test, Visit

www.iasscore.in

- ❧ Kerala's Alangad jaggery
- ❧ European Union's Artificial Intelligence Act
- ❧ 78 MPs Suspended
- ❧ Exclusion of Blood Disorders from Job Reservations
- ❧ Supreme Court Rulings on Enforcement Directorate's Arrest Powers
- ❧ Three sub-schemes under the RAMP programme launched
- ❧ World Bank's move on Multilateral Development Banks (MDBs)
- ❧ Climate Change Performance Index 2024
- ❧ Centre allows use of sugarcane juice, B-molasses to make ethanol
- ❧ 'Noma': The latest addition to WHO's list of neglected tropical diseases
- ❧ COVID sub-variant JN.1



KERALA'S ALANGAD JAGGERY

Context: After an absence of four decades, the renowned Alangad jaggery is poised to make a comeback in the market.

About Alangad Jaggery:

- Alangad jaggery, once famed for its unique taste, enjoyed historical significance, with mentions in Kerala's trading history.



- It was even reputed to have been **exported to China** in the distant past.
- Alangad Jaggery's fame was attributed to its **distinct taste**, with a process that **excluded the use of salt**. The **composition of the fields' soil** imparted a unique flavor to the product.
- The Alangad Jaggery Resurgence:** After a four-decade hiatus, the iconic Alangad jaggery is set to make a triumphant return to the market.
 - The first batch, named after its place of origin, Alangad in Ernakulam, is expected to hit the shelves by the end of January 2024.
 - The revival is part of the '**Krishikkoppam Kalamassery**' initiative, a concerted effort to bring back traditional crops once cultivated in the region.
 - Farmers actively involved in sugarcane cultivation are being supplied all the machinery and equipment required for jaggery production have been procured by the KVK.
 - The initiative is currently in its initial phase, with **sugarcane cultivation taking place on six acres** of land at **Neerikode, Kongorpilly, and Thiruvallur in Alangad panchayat**.

- The **Ernakulam Krishi Vigyan Kendra (KVK)**, Alangad Cooperative Bank, Alangad grama panchayat, Krishi Bhavan, agriculture department, Atma, and Alangad block panchayat are providing comprehensive support for the cultivation.



EUROPEAN UNION'S ARTIFICIAL INTELLIGENCE ACT

Context: The objectives of the EU AI Act, the world's first legislation on AI, are to create a regulatory framework for AI technologies, mitigate risks associated with AI systems, and establish clear guidelines for developers, users, and regulators.

Background:

- On June 14, 2023, the **European Parliament** passed its version of the Artificial Intelligence Act (the "Act").
- The Act is now under review by negotiators from the **European Union's ("EU") three bodies** – the European Commission, Council, and Parliament to reconcile different versions of the Act and finalize implementing language.
- Recently, it has been passed by EU legislators.
- The Act is the most comprehensive regulations affecting artificial intelligence ("AI") systems to date.

About the Act:

- The Act passed by the European Parliament would restrict what the EU believes to be AI's riskiest uses, such as facial recognition software and Chatbots like **ChatGPT**.
- The EU's stated goal is to ensure better conditions for the development and use of innovative technologies.
- The EU recognizes AI's benefits in the **healthcare, transportation, manufacturing, and energy sectors** but hopes to promulgate regulations that curb potential excesses and violations of EU fundamental rights.
- The Act is expansive and would govern any entity providing a service that uses AI.
- This includes services that produce **content, predictions, recommendations, or decisions**.

Key Provisions of the Act:

- Risk-Based Regulation:** The AI Act proposes a risk-based system to regulate AI, dividing systems into unacceptable risk, high risk, and low or minimal risk categories.

- ❖ **Unacceptable Risk:** AI systems posing a threat to people, such as cognitive manipulation and real-time biometric identification, fall under unacceptable risk and are banned.
- ❖ **High Risk:** Systems operating critical infrastructure or impacting fundamental rights are labeled high risk, with compliance requirements and obligations for providers outlined in the Act.
- ❖ **Risk Management for High Risk:** The Act outlines risk management efforts for high-risk systems, including documentation, transparency, human oversight, and obligations for providers to ensure compliance.
- ❖ **Low or Minimal Risk:** Low or minimal risk AI systems must comply with minimal transparency requirements, allowing users to make informed decisions, but they are largely unregulated compared to high-risk systems.
- ❖ **Generative AI software such as ChatGPT will be required to comply with several transparency requirements including:**
 - ▶ Disclosing that the content was generated by an AI system;
 - ▶ Designing the model to prevent it from generating illegal content; and
 - ▶ Publishing summaries of copyrighted data used for the system's training.
- ❖ Providers of foundation models are subject to obligations to undertake risk assessments and mitigate reasonably foreseeable risks; and to establish appropriate data governance measures, obligations relating to the design of the foundation model (including from an environmental impact perspective) and an obligation to register the foundation model in an EU database.



78 MPS SUSPENDED

Context: 78 MPs in Lok Sabha belong to the opposition's "INDI" Alliance were suspended by the Speaker.

About the case:

- ❖ In an unprecedented move, 78 Members of Parliament, belonging to the Opposition INDIA group, were suspended in a single day, marking the **highest number of suspensions ever** recorded in the history of Indian Parliament.
 - ❖ The suspensions occurred due to the **disruption of Parliamentary proceedings** as a protest against the security breach that transpired last week. The total number of suspensions during the Winter Session now stands at 141, with 92 MPs suspended so far.
 - ❖ Opposition decried the actions as a **"murder of democracy."**
 - ❖ The Opposition accused the government of **disregarding democratic norms**, while Government, condemned the **"rude behavior"** of the opposition, asserting that it had embarrassed the entire country.
- ### Reasons behind the Mass Suspensions
- ❖ The disruptive conduct leading to the suspensions was **primarily linked to the demand for a statement from Home Minister** regarding the Parliament security breach.
 - ❖ In Lok Sabha, MPs **displayed placards and climbed onto the Speaker's podium**, while in Rajya Sabha, slogans were raised, causing repeated disruptions.
- ### Root Causes of Parliamentary Disruptions
- ❖ MPs' disruptive behavior in Parliament has historical roots tied to four main factors.
 - ❖ These include:
 - ▶ The lack of time for MPs to address critical matters,
 - ▶ unresponsive attitudes of the government and retaliatory postures,
 - ▶ deliberate disruptions by parties for political or publicity reasons, and
 - ▶ the absence of prompt action against MPs causing disorder.
 - ❖ Over time, the way the Opposition has in determining the Parliamentary calendar has **diminished, with the government setting the agenda and prioritizing government business** over other matters.
- ### Suspension Mechanism and Duration
- ❖ The **Presiding Officer**, be it the Speaker of Lok Sabha or the Chairman of Rajya Sabha, plays a **vital role in** the suspension process.
 - ❖ Rules governing suspension have remained largely **unchanged since 1952**.
 - ❖ The **process** involves **directing an MP** to withdraw for disorderly conduct, naming the legislator if disruptions persist, and finally, moving a motion to suspend the MP for the session.
 - ❖ While **mild offenses lead to admonition or reprimand, continued disruptions can result in suspension** for the remainder of the session.
 - ❖ The **Lok Sabha**, in 2001, **empowered the Speaker with Rule 374A**, allowing automatic suspension for five days or the remaining session for grave and disorderly conduct.
 - ❖ However, **Rajya Sabha has not incorporated this provision**.

EXCLUSION OF BLOOD DISORDERS FROM JOB RESERVATIONS

Context: The Centre's decision to exclude individuals with thalassemia, sickle cell disease, and haemophilia, from government job reservations, despite their recognition as disabilities in the Right to Persons with Disabilities (RPWD) Act of 2016, prompts concerns.

About:

- ◆ The **government provides 4% reservation in government jobs for specific disabilities**, including total loss of vision and low vision, complete loss of hearing and low hearing, locomotor disability, etc.
 - ▶ Government cites Section 34 of RPWD Act, 2016, stating that persons with blood disorders, including thalassemia, are **not eligible for job reservation in government establishments**.



- ◆ Activists express dissatisfaction, asserting that excluding disabilities recognized in the Act from job reservations defeats the Act's purpose.

SUPREME COURT RULINGS ON ENFORCEMENT DIRECTORATE'S ARREST POWERS

Context: In two cases of arrest by the Enforcement Directorate (ED), the accused weren't supplied with written grounds for arrest when they were taken into custody.

- ◆ While one SC Bench deemed this an '**arbitrary exercise of power**', the other upheld it. These

divergent views by SC have given rise to debate on the powers of arrest by ED.

Background of ED's Arrest Powers:

- ◆ The **Prevention of Money Laundering Act (PMLA)** grants the ED the authority to arrest individuals based on credible evidence.
- ◆ **Section 19** of the PMLA emphasizes the need for informing the arrested person of the grounds for arrest at the earliest.

Supreme Court Decisions:

- ◆ Two Supreme Court Benches presented conflicting perspectives on the procedure for informing the accused about the grounds of arrest.
- ◆ **Pankaj Bansal vs. UOI:** Recently, a two-judge Bench mandated the ED to provide written grounds of arrest to the accused at the time of arrest. This decision was considered a crucial safeguard to prevent arbitrary exercise of power.
- ◆ **Vijay Madanlal Choudhary vs. UOI:** Contrarily, another three-judge Bench ruled that orally informing the accused of the grounds of arrest is sufficient. This decision, in effect, diluted the other ruling, creating a divergence in the interpretation of Section 19 of the PMLA.
- ◆ **Ram Kishor Arora's Case:**
 - ▶ The **recent case** of Supertech Limited's founder, Ram Kishor Arora, brought this **legal divergence** to the forefront.
 - ▶ **Arora challenged his arrest**, arguing that oral intimation of grounds violated his rights **under Section 19(1) of the PMLA** and other fundamental rights.

Supreme Court's Decision in Arora's Case:


- ◆ In its ruling, the Supreme Court stated that the **Pankaj Bansal ruling** couldn't be applied retrospectively to Arora's case, as his arrest predates it by approximately three months.
- ◆ The Court, relying on its decision in **Vijay Madanlal's case**, emphasized that oral communication suffices to meet the legal requirements.

Legal Conundrum:

- ◆ **The crux of the matter lies in the interpretation of the phrase "as soon as maybe" in Section 19** of the PMLA.
- ◆ The Bench of Justices Bela Trivedi and Satish Chandra Sharma insisted that this **phrase denotes an early, reasonably convenient, or requisite period**.

Precedent Dilemma:

- ◆ The legal system faces a challenge when two Benches of equal strength arrive at conflicting conclusions on the same legal question. While the rule of precedents aims to ensure consistency, there is ambiguity when two Benches differ.



THREE SUB-SCHEMES UNDER THE RAMP PROGRAMME LAUNCHED

Context: The Union Minister for MSME has launched three sub-schemes under the aegis of the RAMP programme namely, MSME Green Investment and Financing for Transformation Scheme (MSE GIFT Scheme), MSE Scheme for Promotion and Investment in Circular Economy (MSE SPICE Scheme) MSE Scheme on Online Dispute Resolution for Delayed Payments.

- ◆ The Ministry exchanged **Memorandum of Understanding (MoUs)** with the implementing agencies SIDBI (for MSME GIFT and MSME SPICE schemes) and with National Informatics Centre Services Inc. (for NICSI) for MSE ODR scheme.


About the Schemes:

- ◆ **The MSME Green Investment and Financing for Transformation Scheme (MSME GIFT Scheme):** It intends to help MSMEs adopt green technology with interest subvention and credit guarantee support.
- ◆ **The MSE Scheme for Promotion and Investment in Circular Economy (MSE SPICE Scheme):** It is the first ever scheme in the Government to support circular economy projects which will be done through credit subsidy and will lead to realising the dream of MSME sector towards zero emissions by 2070.
 - The Support for Commercialisation of IP Programme (MSME – SCIP Programme) will enable the innovators in the **MSME sector to commercialize their IPR.**
- ◆ **The MSE Scheme on Online Dispute Resolution for Delayed Payments:** It is a first of its kind scheme to synergise legal support with modern IT tools and Artificial Intelligence to address the incidences of delayed payments for Micro and Small Enterprises.
- ◆ The **National MSME Council** has been set up by the Ministry to work as an administrative and functional body of the World Bank supported **RAMP Programme to oversee inter-Central Ministerial/Departmental co-ordination**, Centre

State synergies and advise / monitor progress on the reforms mandated in the MSME sector.

RAMP programme:

- It is a World Bank assisted **Central Sector Scheme**, supporting various CoronaVirus Disease 2019 (Covid) Resilience and Recovery Interventions of the **Ministry of Micro, Small and Medium Enterprises (MoMSME).**
- **Aimed at:**
 - Improving access to market and credit
 - Strengthening institutions and governance at the Centre and State
 - Improving Centre-State linkages and partnerships
 - Addressing issues of delayed payments and greening of MSMEs
- **Components:**
 - The SIPs would include an outreach plan for identification and mobilisation of MSMEs under RAMP, identify key constraints and gaps, set milestones and project the required budgets for interventions in priority sectors including renewable energy, rural & non-farm business, wholesale and retail trade, village and cottage industries, women enterprises etc.
 - The overall monitoring and policy overview of RAMP would be done by an apex National MSME Council.
 - The council will be headed by the Minister for MSME, including representation from various Ministries and supported by a secretariat.



WORLD BANK'S MOVE ON MULTILATERAL DEVELOPMENT BANKS (MDBS)

Context: Recently, the World Bank has set up a task force to study the recommendations for strengthening multilateral development banks (MDBs), laid out by an independent experts' group formed during India's G20 presidency.

Background:

- ◆ Multilateral development banks (MDBs) originated in the aftermath of **World War II** to rebuild war-ravaged nations and stabilize the global financial system.
- ◆ Today, MDBs fund **infrastructure, energy, education, and environmental sustainability** in developing countries.

What Is a Multilateral Development Bank (MDB)?

- ◆ A multilateral development bank (MDB) is an international financial institution chartered by two or more countries for the purpose of encouraging economic development in poorer nations.
- ◆ Multilateral development banks consist of member nations from developed and developing countries.
- ◆ MDBs provide loans and grants to member nations to fund projects that support social and economic development, such as the building of new roads or providing clean water to communities.

About India's plan:

Major Multilateral Development Banks:

The following is a list of the major multilateral development banks, ranked by **total assets** are;

- European Investment Bank: €555.8 billion (\$606.5 billion)
- International Bank for Reconstruction and Development, World Bank Group: \$283 billion
- Asian Development Bank: \$191.9 billion
- International Development Association, World Bank Group: \$188.5 billion
- Inter-American Development Bank: \$129.5 billion
- European Bank for Reconstruction and Development: €61.9 billion (\$67.7 billion)
- African Development Bank: 33.8 billion UA
- Asian Infrastructure Investment Bank: \$19.6 billion
- Islamic Development Bank: 22 billion Islamic dinars (\$18.5 billion)
- Central American Bank for Economic Integration: \$10.9 billion
- New Development Bank: \$10.4 billion

- ◆ World Bank has identified **eight unique global challenges** to focus on in the next few years as they affect many countries and require attention.
- ◆ The Indian Union Finance Minister highlighted the need for World Bank to explore possibility of coordinated approach in implementation of the projects with special emphasis on Finance Plus/ Budget Plus elements in projects funded by the World Bank.

How a Multilateral Development Bank (MDB) Works?

- ◆ Multilateral development banks are subject to **international law**.

- ◆ They and other international financial institutions, such as the **International Monetary Fund (IMF)**.
- ◆ The **World Bank**, which has been semi-officially dominated by the U.S. since its founding, is one of these institutions.
- ◆ Unlike commercial banks, MDBs do not seek to maximize profits for their shareholders.
- ◆ Instead, they prioritize development goals, such as ending extreme poverty and reducing economic inequality.
- ◆ They often lend at low or no interest or provide grants to fund projects in infrastructure, energy, education, environmental sustainability, and other areas that promote development.

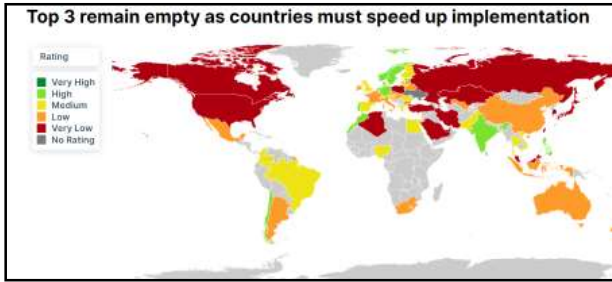


CLIMATE CHANGE PERFORMANCE INDEX 2024

Context: India's secured 7th position in recently released Climate Change Performance Index (CCPI) 2024 underscoring its notable role and contribution in the ongoing global efforts aimed at mitigating climate change.

What are the Major Takeaways From CCPI 2024?

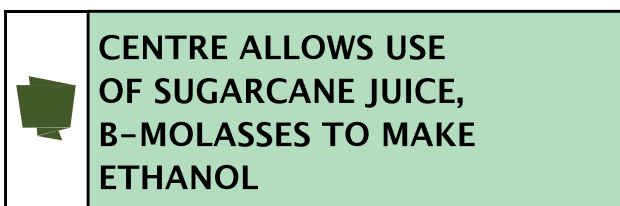
- ◆ **About:** CCPI, published annually since 2005, is an independent monitoring tool for tracking countries' climate protection performance. It increases **transparency in national and international climate policy** and enables comparison of individual countries' climate protection efforts and progress.
 - It is published by **Germanwatch, the NewClimate Institute, and Climate Action Network International**.
- ◆ It indicates the **climate mitigation efforts of 63 countries and the EU**, which collectively account for over **90% of global greenhouse gas (GHG) emissions**.
- ◆ **Performance Metrics:** The CCPI evaluates countries across four key categories: **Greenhouse Gas (GHG) Emissions (40%), Renewable Energy (20%), Energy Use (20%), and Climate Policy (20%)**.
- ◆ **CCPI 2024:** No country performed well enough in all index categories to achieve an overall very high rating. The **first three overall positions therefore remain empty**.
 - **Denmark** claimed the 4th spot, **Estonia** followed in 5th place, and the **Philippines** secured the 6th position among the top ranks.



- ◆ **India's Ranking in CCPI 2024:** India secured the **7th position** in the **CCPI 2024**, exhibiting a stride forward from **8th spot in CCPI 2023**. Interestingly, due to the **absence of countries in the first three spots**, India effectively stands **4th** in global climate performance.

India's Score and Rankings in Key Categories:

- ◆ **GHG Emissions & Energy Use:** India ranked **9th in GHG Emissions** and **10th in Energy Use** among assessed countries, largely attributed to its lower per capita energy use, a factor bolstering its climate standing.
 - ▶ Also, in the per capita GHG category, the country is on track to meet a benchmark of well below 2°C.
- ◆ **Climate Policy:** India secured the **10th spot in Climate Policy**, showcasing moderate progress compared to its performance in previous assessments.
- ◆ **Renewable Energy:** India's performance showed a more moderate rank, standing at 37th, barely remaining within the 'high' performance category.
 - ▶ This position marks a decline from the **24th spot in CCPI 2023**.



Context: The government's recent decision to **ban the use of sugarcane juice and sugar syrup for ethanol production** comes a week after the industry requested a reversal of the decision.

Key Highlights -

- ◆ **Policy Reversal:** The government has **reversed its decision** to ban the use of sugarcane juice for ethanol production, allowing its **utilization along with B-heavy molasses**. However, **sugar diversion** for ethanol is **capped at 17 lakh tonnes**.

- ◆ **Temporary Capping:** The cap on sugar diversion will be **applicable for the 2023-24 supply year**, ending in October next year. The decision follows a week of industry protests against the initial ban on cane juice and sugar syrup for ethanol.



- ◆ **Flexibility for Sugar Mills:** Sugar mills are now **granted flexibility** in using **both sugarcane juice and B-heavy molasses** within the 17 lakh tonnes cap for ethanol production in the ongoing supply year.
- ◆ **Modalities Under Consideration:** Officials are working on determining the proportion of cane juice and molasses for ethanol production. Some ethanol has already been produced using cane juice in the current supply year.
- ◆ **Industry Representation:** The reversal comes after representations from the sugar industry to review the earlier ban, emphasizing its impact on ethanol production and financial strain on mills.
- ◆ **Concerns and Challenges:** The government's decision is **prompted by concerns over low cane production**, exacerbated by recent drought conditions in Maharashtra and Karnataka.
- ◆ **Ethanol Blending Target:** Despite challenges, officials express confidence in achieving the 15% ethanol blending target with petrol in the 2023-24 supply year.
- ◆ **Review of Sugarcane Juice Ban:** Acknowledging industry distress, officials assure a review of the ban on sugarcane juice, emphasizing its temporary nature and the need for national interest.
- ◆ **Industry's Financial Strain:** The Indian Sugar Mills Association urges the government to revise ethanol prices from B-heavy and C-heavy molasses to support millers financially.
- ◆ **Price Revision Demands:** Industry demands include raising ethanol prices from B-heavy molasses to ₹64 per litre and from C-heavy molasses to ₹58-59 per litre.

National Biofuel Policy:

- The policy is aimed at taking forward the **indicative target** of achieving **20% blending of biofuels** with fossil-based fuels by **2030**.
- The policy intends to ensure the adequate and sustained **availability of domestic feedstock for biofuel production, increasing farmers' income, import reduction, employment generation and waste to wealth creation**.
- This policy clearly exhibits the **Centre's push towards strengthening the energy infrastructure** of the country while promoting the agenda of sustainability.

National Policy on Biofuels 2018

Salient features



An indicative target of **20% blending** of ethanol in petrol and **5% blending** of biodiesel in diesel is proposed by 2030.



With a thrust on **Advanced Biofuels**, the Policy indicates a viability gap funding scheme for **2G ethanol Bio refineries** of **Rs.5000 crore in 6 years** in addition to additional tax incentives, higher purchase price as compared to **1G biofuels**.



Categorization of Biofuels into **Basic Biofuels** - First generation(1G) Bioethanol & biodiesel and "**Advanced Biofuels**" - Second Generation(2G) ethanol, drop-in fuels, **algae based** Third Generation(3G) Biofuels.



Increase scope of raw material for ethanol procurement by encouraging Intermediate (**B-Molasses**), Sugarcane Juice, other Sugar containing materials and damaged as well as surplus food grains.



Develop **National Biomass repository** by conducting **appraisal of biomass** across the Country.



Bio diesel production to be encouraged from non edible oilseeds, **used cooking oil**, short gestation crops and development of supply chain mechanisms.



Thrust on **research, development and demonstration** in the field of **Biofuel feedstock** production, advanced conversion technologies from identified feedstock.



Setting up of **National Biofuel coordination committee (NBCC)** under **Ministry of Petroleum & Natural Gas** and Working Group on Biofuels.



'NOMA': THE LATEST ADDITION TO WHO'S LIST OF NEGLECTED TROPICAL DISEASES

Context: The severe gangrenous disease of mouth and face has **90% mortality rate** and is associated with **extreme poverty, malnutrition**

WHO and Noma:

- The World Health Organization (WHO) took a significant step on December 15, 2023, by **officially adding noma**, a severe gangrenous disease affecting the mouth and face, to its list of **neglected tropical diseases (NTD)**.
- Commonly known as **cancrum oris**, **noma** poses a significant health threat, especially to marginalized children living in extreme poverty.

Neglected Tropical Diseases (NTDs):

- NTDs are a group of infections that are very common amongst marginalized communities in the developing regions of Africa, Asia and the Americas.
- They are caused by a variety of pathogens such as viruses, bacteria, protozoa and parasitic worms.
- NTDs are common in tropical areas where people do not have access to clean water and sanitation.
- These NTD diseases receive less funding for research and treatment than malaises like tuberculosis, HIV-AIDS and malaria.
- Examples of NTDs are: snakebite envenomation, scabies, yaws, trachoma, Leishmaniasis and Chagas disease etc.

The Severity of Noma

- ◆ **High Mortality Rate:** Noma, with a **mortality rate of approximately 90%**, is associated with **extreme poverty, malnutrition, poor sanitation, and limited access to oral hygiene**.
- ◆ **Primary Target:** It primarily targets **children aged 2-6 years** and is prevalent in impoverished communities.

Lack of Awareness and Reliable Data

- ◆ **Lack of Awareness:** The lack of awareness surrounding noma is compounded by the **absence of reliable data**.
- ◆ **Disease Prevalence:** While the **WHO estimates 140,000 cases per year** with a **prevalence of 770,000 cases**, the latest data dates back to 1998, emphasizing the **hidden and neglected nature of this disease**.

Origins and Risk Factors

- ◆ **Origin of Disease:** The name "noma" is derived from the Greek word "nomē," meaning "to devour," reflecting the **disease's ability to consume facial tissue and bones** if not treated early.
- ◆ **Risk Factors:** Noma is linked to **poor oral hygiene, malnutrition, weakened immune systems, infections, and extreme poverty**.
- ◆ Although **not contagious**, it tends to strike when the body's defenses are weak.

Global Distribution and Impact

- ◆ **Developing Countries:** Noma is frequently observed in developing countries, particularly in **sub-Saharan Africa**, where it disproportionately affects poor children aged 3-10 years.
- ◆ **Need for Early Detection:** **Early detection is crucial due to its high mortality rate**, and interventions involving basic hygiene, antibiotics, and nutritional rehabilitation can significantly slow its spread.

Treatment Challenges and Consequences

- ◆ **Early treatment:** Early treatment is imperative, as noma often **starts as an ulcer on the mucous membrane**, quickly developing into **massive necrosis**.
- ◆ **Consequences:** Survivors face **significant consequences**, including **facial disfigurement, jaw muscle spasms, oral incontinence, and speech problems**.
- ◆ **Effective drugs and Treatment:** Access to **effective drugs and surgical treatments remains a challenge**, particularly for those in extreme poverty.

**COVID SUB-VARIANT JN.1**

Context: Recently, the Union Health Ministry has announced an alert on the Indian variant of COVID-19, namely JN.1, which was included in the list of 'variant of Interest' by World Health Organisation (WHO).

About:

- ◆ **The Rising COVID-19 Cases and JN.1 Sub-Variant:**

Understanding JN.1 Variant:

- **Variant Lineage:** JN.1 is a sub-variant of BA.2.86, also known as Pirola, first detected in the United States.
- **Mutation Characteristics:** While JN.1 has only one additional mutation on the spike protein compared to Pirola, its high number of spike protein mutations has drawn attention of researchers.

- ◆ **Focus:** Surge in COVID-19 cases, particularly the JN.1 sub-variant.
- ◆ **Statistics:** India reports 21 cases of JN.1, with 19 traced to Goa, and 1 each in Kerala and Maharashtra.

II. Authorities' Response and Home-based Treatment

- ◆ **Alert Status:** Authorities on high alert; 92% opt for home-based treatment.
- ◆ **Government Actions:** Health Minister's virtual meeting, emphasizing mock drills every three months.
- ◆ **Statement:** No need to panic; preparedness through drills, surveillance, and effective communication.

III. Epidemiological Trends and Deaths in December

- ◆ **Data Analyst's Insight:** 19 COVID-19 deaths in December, conflicting reports of 16 deaths.

- ◆ **Daily Cases:** 614 fresh cases on December 19, the highest since May 20.
- ◆ **Regional Trends:** Kerala reports 2,041 of 2,311 active cases, attributing to robust reporting.

IV. WHO Monitoring and Variant of Interest (VOI)

- ◆ **WHO Classification:** JN.1 classified as a VOI; considered a low global public health risk.
- ◆ **Other VOIs:** XBB.1.5, XBB.1.16, EG.5, BA.2.86—all descendants of omicron sub-variants.

V. Understanding Variants of Interest (VOIs)

- ◆ **Definition:** A SARS-CoV-2 variant with genetic changes impacting transmissibility, virulence, etc.
- ◆ **VOI Criteria:** Growth advantage in multiple WHO regions, increasing prevalence over time, and notable epidemiological impacts.

VI. Surveillance and Genome Sequencing

- ◆ **Global Collaboration:** Genomic surveillance, epidemiology, and clinical behavior monitoring.
- ◆ **Submission Requirements:** Countries encouraged submitting genome sequences to GISAID and share virus isolates via WHO Biohub.

VII. JN.1 Sequences and International Cooperation

- ◆ **Data Submission:** 7,344 JN.1 sequences from 41 countries on GISAID as of December 16.
- ◆ **International Contribution:** India third-largest contributor to GISAID globally.

Way Forward:

- ◆ **Criteria for VOCs:** Must meet VOI criteria and exhibit detrimental changes in severity, impact on health systems, or vaccine effectiveness.



Section D [QUIK BYTES]

- ☞ Solar-electric boat Barracuda launched
- ☞ Mahalakshmi Scheme
- ☞ Tax Inspectors without Borders (TIWB)
- ☞ Gelephu Smartcity Project
- ☞ Disinflation
- ☞ Indira Gandhi Prize for Peace

[LOCATION IN NEWS]

- ☞ Srivaikuntam
- ☞ Red Sea

[SPECIES IN NEWS]

- ☞ Wisent (European Wild Bison)
- ☞ Black Pelicans (*Pelecanus niger*)

Solar-electric boat Barracuda launched



Taking ahead the cause of eco-friendly maritime transportation, '**Barracuda**', mentioned to be **India's fastest solar-electric boat**, was launched at the yard of **Navalt Solar and Electric Boats**, located off Aroor in Alappuzha.

About:

- Named after the swift, long fish, Barracuda was designed by Navalt and can be deployed even in the rough seas as a workboat to ferry up to **12 passengers and cargo**.
- The **14-metre-long, 4.4-metre-wide vessel** can attain a top speed of **12.5 knots (23 kmph)** and has a range of seven hours on a single charge.
- It has twin **50 kW electric motors**, a marine-grade LFP battery, and **6 kW solar powers**, epitomising efficient and clean energy usage.
- It is engineered to navigate through waves as tall as **four metres** and operates without noise, vibration and air pollution.
- It won the **world's best start-up** award in the mobility and transportation category at the Berlin **Start-up Energy Transition Awards 2023**.
- The firm that operates from Kochi has also received various prestigious awards, including the **Gustave Trousse Awards** twice.

Mahalakshmi Scheme



In Telangana, around 450,000 autos operate, with 200,000 in Hyderabad and Secunderabad. Approximately 600,000 individuals depend on autorickshaws for their livelihood, both directly and indirectly.

About:

- Under **Mahalakshmi Scheme**, **women** can show any identity proof of local domicile and **avail of free rides** in around 7,292 bus services run by TSRTC. According to TSRTC estimates, around 40 lakh passengers ply on buses daily, out of which at least 30% are women.
- **Auto drivers** are **protesting** across Telangana demanding that the government **provide an alternate livelihood** for them.

Tax Inspectors without Borders (TIWB)

Tax Inspectors without Borders (TIWB), a joint initiative of the United Nations Development Programme (UNDP) and the Organisation for Economic Cooperation and Development (OECD).

Why in news?

- Recently it launched a programme in Saint Lucia in December, 2023.



- India has been chosen as the Partner Administration and will provide Tax Experts for this programme.
- Aim is to aid in strengthening its tax administration by transferring technical knowledge and skills to its tax administration, and through sharing of best practices.
- The focus of the programme will be on effective use of automatic exchange of information under the Common Reporting Standard (CRS) framework.
- The objective of the TIWB Initiative is to enable sharing of tax audit knowledge and skills with tax administrations in developing countries through a targeted, real time "learning by doing" approach

Gelephu Smartcity Project



Bhutan King Jigme Khesar Namgyel Wangchuck speaks during the **National Day celebration** about the upcoming mega project a 'Point of inflection' and 'transformation' for **Bhutan and South Asia**.

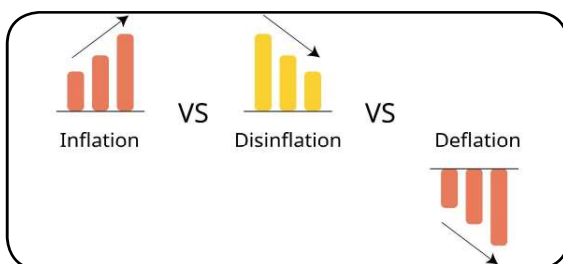
About the Project:

- Bhutan plans to build a massive "international city" in an area of over 1,000 sq. km. on its border with Assam under the project as an "economic corridor connecting **South Asia with Southeast Asia** via India's northeastern States".
- Also, the first India-Bhutan **railway line to Gelephu**, which would also connect with roadways and border trading and crossing points into Assam and West Bengal, and over time which will give Bhutan access to **Myanmar, Thailand, Cambodia, and Singapore**.

The Location:

- Gelephu, **India- Bhutan** crossing at Gelephu is important tourist place.
- Roughly 41 km from Kajalgaon, the headquarter of Chirang, 50 km from Bongaigaon, and 340 km from Siliguri.

Disinflation



As per RBI's report named "**State of the Economy**", the pace of global growth may slow further in 2024 **while disinflation** at varying pace in different geographies may pave the way for interest rate reductions.

What is Disinflation?

- Disinflation is a temporary slowing of the pace of price inflation.
- The term is used to describe occasions when the **inflation rate has reduced marginally over the short term**.

How it is different from Inflation?

Inflation:

- Inflation is the rate at which **prices for goods and services rise**.
- Inflation is sometimes classified into three types: demand-pull inflation, cost-push inflation, and built-in inflation.
- Unlike inflation and deflation, which refer to the direction of prices, disinflation refers to the rate of change in the rate of inflation.
- A healthy amount of disinflation is necessary since it prevents the economy from overheating.

Indira Gandhi Prize for Peace



Music conductor Daniel Barenboim and peace activist Ali Abu Awwad were jointly awarded the Indira Gandhi Prize for Peace, Disarmament and Development 2023 for promoting amity among the Israeli and Palestinian people.

About the Award:

- The Indira Gandhi Peace Prize is an annual prestigious award.
- It has been named after former Prime Minister Smt. Indira Gandhi.
- It is being conferred every year since 1986 by Indira Gandhi Memorial Trust.
- It consists of a monetary award of **`25 lakh** along with a citation.

LOCATION IN NEWS

Srivaikuntam



Srivaikuntam **receives record rainfall**, highest in Tamil Nadu.

About -

- With intense rainfall pounding the district on Sunday, Srivaikuntam of Thoothukudi received 479 mm, the highest rainfall ever recorded in the plains of Tamil Nadu.
- Following heavy inflow of more than 15,000 cusecs of water into dams in Papanasam, Servalaru and Manimutharu in Tirunelveli.

Reasons for High Rainfall

- The 2023 rainfall caused by the **cyclonic circulation** is rather higher than any rains ever received in the plains in the state.

Previous Records

- The rains have **surpassed the rainfall records of November 1992**, which was previously considered the highest rain received in the century.
- The November 1992 rainfalls **flooded the river Thamirabarani**, following 965 mm of rains at **Kakachi in Manjolai hills**, where the river originates.

Red Sea



The United States spearheads a multinational effort to protect maritime trade in the Red Sea, responding to heightened threats from Yemen's Iran-aligned Houthis, who have conducted missile and drone attacks.

About:

- An inlet of the Indian Ocean **between Africa and Asia**. One of the most saline bodies of water in the world.
- Bordering Countries:** Egypt, Saudi Arabia, Yemen, Sudan, Eritrea and Djibouti.
- Connected to the Indian Ocean in south through the Bab el Mandeb strait and the Gulf of Aden.
- In the north are the Sinai Peninsula, the Gulf of Aqaba, and the Gulf of Suez (leading to the Suez Canal).
- Occupies a part of **Great Rift Valley** (Afro-Arabian Rift Valley).

SPECIES IN NEWS

Wisent (European Wild Bison)



The **Ukraine war** may **impede efforts** to save Europe's last megafauna, caution researchers in a new study.

About the Species:

- The wisent **roamed across Europe** in large herds at the end of the last ice age.
- By **1927**, almost a decade after World War I, it **became extinct** in the wild, with only about **60 individuals remaining in captivity**.
- Rapid environmental change** and **hunting by humans** were the main drivers of the wisent's extirpation across Europe.
- The **European bison is a priority species for conservation** because it serves an important role as an ecosystem engineer, restoring grassland habitat.

Geography:

- The European Wisent**, also known as the European Bison, primarily inhabits **forested areas in Eastern Europe, including countries like Poland, Belarus, Russia, Lithuania, and Ukraine**.
- They may also be found in controlled environments in various parts of Europe as part of conservation and reintroduction efforts.

Black Pelicans (*Pelecanus niger*)



National Green Tribunal (NGT) seeks biodiversity loss report, State roping-in national institutes like **National Centre for Coastal Research (NCCR)** and **National Institute of Oceanography (NIO)** for intermediate and long-term remedial.

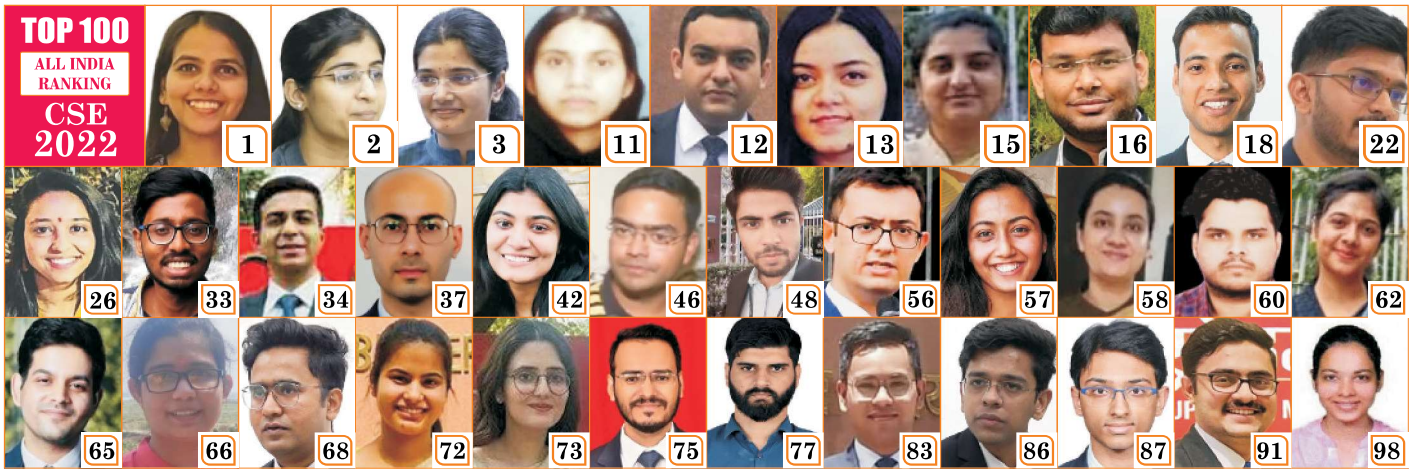
About the Species:

- The Black Pelican, *Pelecanus niger* is an aquatic bird that belongs to the Pelecaniformes order. It is one of many birds located in Devonshire.
- The Black Pelican is a **large water bird** that is known for its characteristic dark plumage - a departure from the common lighter coloured plumage of most other Pelican species.
- Despite its name, the Pelican's feathers appear to be more of a dark purple to dark indigo colour tone.

Found In:

- In India, pelicans breed in Nelapattu, Koonthakulam and Kokka Bellur.
- **Kolleru Bird Sanctuary** is located in the state of Andhra Pradesh between Krishna and Godavari deltas.
- The lake is one of the largest freshwater lakes in India and listed under the Ramsar Convention wetland of international importance.





SUCCESS IS A PRACTICE WE DO!

